

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: June 7, 2005, 14:31:10 ; Search time 43 Seconds
(without alignments)
253.460 Million cell updates/sec

Title: US-10-049-372-4
Perfect score: 782
Sequence: 1 MKTFLGVTGLAALSTL.....KLVGPCRHVGPGLTCR 146

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

.Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA:*
1: /cgn2_6/prodata/1/iaa/5A COMB.pep:*
2: /cgn2_6/prodata/1/iaa/5B COMB.pep:*
3: /cgn2_6/prodata/1/iaa/6A COMB.pep:*
4: /cgn2_6/prodata/1/iaa/6B COMB.pep:*
5: /cgn2_6/prodata/1/iaa/PCTUS COMB.pep:*
6: /cgn2_6/prodata/1/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	623	79.7	170	3	US-09-130-663-2
2	623	79.7	170	3	US-09-432-335-2
3	623	79.7	170	3	US-09-614-022-2
4	385.5	49.3	173	4	US-09-690-454-78
5	321	41.0	66	4	US-09-513-999C-7655
6	274.5	35.1	176	3	US-09-130-663-29
7	274.5	35.1	176	3	US-09-432-335-29
8	274.5	35.1	176	3	US-09-614-022-29
9	244	31.2	174	2	US-08-467-603-2
10	244	31.2	174	2	US-08-466-793-2
11	244	31.2	174	2	US-08-491-861A-2
12	244	31.2	174	2	US-09-374-671A-2
13	230	29.4	144	2	US-08-467-603-62
14	230	29.4	144	2	US-08-466-793-62
15	230	29.4	144	2	US-08-491-861A-62
16	230	29.4	144	2	US-09-374-671A-62
17	216.5	27.7	145	2	US-08-467-603-61
18	216.5	27.7	145	2	US-08-466-793-61
19	216.5	27.7	145	2	US-08-491-861A-61
20	216.5	27.7	145	2	US-09-374-671A-61
21	169	21.6	105	2	US-08-467-603-63
22	169	21.6	105	2	US-08-466-793-63
23	169	21.6	105	2	US-08-491-861A-63
24	169	21.6	105	4	US-09-374-671A-63
25	150	19.2	87	4	US-09-690-454-221
26	134	17.1	65	4	US-09-374-671A-105
27	124	15.9	53	4	US-09-374-671A-106

28	122	15.6	183	4	US-09-800-729-202	Sequence 202, App
29	121.5	15.5	184	4	US-09-800-729-203	Sequence 203, App
30	120.5	15.4	184	4	US-09-800-729-204	Sequence 204, App
31	99	12.7	178	1	US-08-825-891-1	Sequence 1, Appli
32	97	12.4	223	4	US-09-690-454-225	Sequence 225, App
33	96	12.3	222	4	US-09-949-016-9658	Sequence 9658, Ap
34	89	11.4	188	3	US-09-130-663-30	Sequence 30, Appl
35	89	11.4	188	3	US-09-332-934-14	Sequence 14, Appl
36	89	11.4	188	3	US-09-432-335-30	Sequence 30, Appl
37	89	11.4	188	3	US-09-614-022-30	Sequence 30, Appl
38	85	10.9	162	4	US-09-919-497-88	Sequence 88, Appl
39	85	10.9	162	4	US-09-949-016-6241	Sequence 6241, Ap
40	78	10.0	490	4	US-09-949-016-10788	Sequence 10788, A
41	78	10.0	543	4	US-09-529-093A-2	Sequence 2, Appli
42	78	10.0	543	4	US-09-529-154-2	Sequence 2, Appli
43	74	9.5	529	4	US-09-589-733C-16	Sequence 16, Appli
44	73	9.3	348	3	US-09-071-709-2	Sequence 2, Appli
45	72.5	9.3	359	3	US-08-992-176-6	Sequence 6, Appli

ALIGNMENTS

RESULT 1

US-09-130-663-2
; Sequence 2, Application US/09130663A
; Patent No. 6020163
; GENERAL INFORMATION:
; APPLICANT: Konklin, Darrell C.
; TITLE OF INVENTION: LIPOCALIN HOMOLOG
; FILE REFERENCE: 97-24
; CURRENT APPLICATION NUMBER: US/09/130,663A
; CURRENT FILING DATE: 1998-08-05
; EARLIER APPLICATION NUMBER: 60/054,867
; EARLIER FILING DATE: 1997-08-06
; NUMBER OF SEQ ID NOS: 30
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 2:
; LENGTH: 170
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-130-663-2

Query Match 79.7%; Score 623; DB 3; Length 170;

Best Local Similarity 91.5%; Pred. No. 6.8e-69;

Matches 119; Conservative 4; Mismatches 7; Indels 0; Gaps 0;

QY 1 MKTFLGVTGLAALSTLEEDITGTWYKAMVVDKDFPDRRPRKVPVKVTALGGG 60

Db 1 MKTFLGVTGLAALSTLEEDITGTWYKAMVVDKDFPDRRPRKVPVKVTALGGG 60

QY 61 NLEATFTFMRDRCIOKKILMKRTEPGKFSAYGGRKLYLQELPCTDDYVFKDQRRG 120

Db 61 KLEATFTFMRDRCIOKKILMKRTEPGKFSAYGGRKLYLQELPCTDDYVFKDQHHG 120

QY 121 GLRYMKLVG 130

Db 121 GLRHMKLVG 130

17/141 = 81%

RESULT 2

US-09-432-335-2
; Sequence 2, Application US/09432335
; Patent No. 6143720
; GENERAL INFORMATION:
; APPLICANT: Konklin, Darrell C.
; TITLE OF INVENTION: LIPOCALIN HOMOLOG
; FILE REFERENCE: 97-24
; CURRENT APPLICATION NUMBER: US/09/432,335
; CURRENT FILING DATE: 1999-11-02
; EARLIER APPLICATION NUMBER: 09/130,663
; EARLIER FILING DATE: 1998-08-06
; EARLIER APPLICATION NUMBER: 60/054,867

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; EARLIER FILING DATE: 1997-08-06
; NUMBER OF SEQ ID NOS: 30
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 170
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-432-335-2

Query Match      79.7%; Score 623; DB 3; Length 170;
Best Local Similarity 91.5%; Pred. No. 6.8e-69;
Matches 119; Conservative 4; Mismatches 7; Indels 0; Gaps 0;

QY 1 MKTLFLGVTGLAALSTFLLEEDITGTWYVKAMVVDKDFPEDRRPRKVSPPKVTALGGG 60
DB 1 MKTLFLGVTGLAALSTFLLEEDITGTWYVKAMVVDKDFPEDRRPRKVSPPKVTALGGG 60

QY 61 NLEATFTFMREDRCIQKILMRKTEEPGKFSAYGGRKLIYLQELPGTDDYVYCKDQRRG 120
DB 61 NLEATFTFMREDRCIQKILMRKTEEPGKFSAYGGRKLIYLQELPRRDHYIFYCKDQHHG 120

QY 121 GLRYMGKLVG 130
DB 121 GLLHMGKLVG 130

RESULT 3
US-09-614-022-2
; Sequence 2, Application US/09614022
; Patent No. 6365716
; GENERAL INFORMATION:
; APPLICANT: Conklin, Darrell C.
; TITLE OF INVENTION: LIPOCALIN HOMOLOG
; FILE REFERENCE: 97-24
; CURRENT APPLICATION NUMBER: US/09/614,022
; CURRENT FILING DATE: 2000-07-11
; PRIOR APPLICATION NUMBER: 09/130,663
; PRIOR FILING DATE: 1998-08-06
; PRIOR APPLICATION NUMBER: 60/054,867
; PRIOR FILING DATE: 1997-08-06
; NUMBER OF SEQ ID NOS: 30
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 170
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-614-022-2

Query Match      79.7%; Score 623; DB 3; Length 170;
Best Local Similarity 91.5%; Pred. No. 6.8e-69;
Matches 119; Conservative 4; Mismatches 7; Indels 0; Gaps 0;

QY 1 MKTLFLGVTGLAALSTFLLEEDITGTWYVKAMVVDKDFPEDRRPRKVSPPKVTALGGG 60
DB 1 MKTLFLGVTGLAALSTFLLEEDITGTWYVKAMVVDKDFPEDRRPRKVSPPKVTALGGG 60

QY 61 NLEATFTFMREDRCIQKILMRKTEEPGKFSAYGGRKLIYLQELPGTDDYVYCKDQRRG 120
DB 61 NLEATFTFMREDRCIQKILMRKTEEPGKFSAYGGRKLIYLQELPRRDHYIFYCKDQHHG 120

QY 121 GLRYMGKLVG 130
DB 121 GLLHMGKLVG 130

RESULT 4
US-09-690-454-78
; Sequence 78, Application US/09690454
; Patent No. 6531447
; GENERAL INFORMATION:
; APPLICANT: Steven M. Ruben, et al.
; TITLE OF INVENTION: 32 Human Secreted Proteins
; FILE REFERENCE: PZ006P1

; CURRENT APPLICATION NUMBER: US/09/690,454
; CURRENT FILING DATE: 2000-10-18
; PRIOR APPLICATION NUMBER: 09/189,144
; PRIOR FILING DATE: 1998-11-10
; PRIOR APPLICATION NUMBER: 60/044,039
; PRIOR FILING DATE: May 30, 1997
; PRIOR APPLICATION NUMBER: 60/048,093
; PRIOR FILING DATE: May 30, 1997
; PRIOR APPLICATION NUMBER: 60/048,190
; PRIOR FILING DATE: May 30, 1997
; PRIOR APPLICATION NUMBER: 60/050,935
; PRIOR FILING DATE: May 30, 1997
; PRIOR APPLICATION NUMBER: 60/048,101
; PRIOR FILING DATE: May 30, 1997
; PRIOR APPLICATION NUMBER: 60/048,356
; PRIOR FILING DATE: May 30, 1997
; PRIOR APPLICATION NUMBER: 60/056,250
; PRIOR FILING DATE: August 29, 1997
; PRIOR APPLICATION NUMBER: 60/056,296
; PRIOR FILING DATE: August 29, 1997
; PRIOR APPLICATION NUMBER: 60/056,293
; PRIOR FILING DATE: August 29, 1997
; NUMBER OF SEQ ID NOS: 229
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 78
; LENGTH: 173
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (18)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (21)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (80)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (102)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-690-454-78

Query Match      49.3%; Score 385.5; DB 4; Length 173;
Best Local Similarity 51.1%; Pred. No. 1.6e-39;
Matches 93; Conservative 7; Mismatches 33; Indels 49; Gaps 4;

QY 1 MKTLFLGVTGLAALSTFLLEEDITGTWYVKAMVVDKDFPEDRRPRKVSPPKVTALGGG 60
DB 1 MKTLFLGVTGLAALSTFLLEEDITGTWYVKAMVVDKTF-RRQEAQKVSPPKVTALGGG 59

QY 61 NLEATFTFMREDRCIQKILMRKTEEPGKFSAYGGRKLIYLQELPGTDDYV-111
DB 60 KLEATFTFMREDRCIQKILMRKTEEPGKYS-CEPLPHSHPHXPPPTPVHQ 111

QY 112 -----FYCKDQRRGLRYMGKLV-----GPCRCHVQSP 140
DB 112 PPQVESAAQLLPGFQLCPPPRRGWLPLPGGLVALTSDTGCDRLVRSRDGPDHACPLGGP 171

QY 141 GH 142
DB 172 SH 173

RESULT 5
US-09-513-999C-7655
; Sequence 7655, Application US/09513999C
; Patent No. 6783961
; GENERAL INFORMATION:
; APPLICANT: Dumas Milne Edwards, J.B.
; APPLICANT: Duclert, A.
; APPLICANT: Giordano, J.Y.
; TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.
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RESULT 9
US-08-467-603-2
; Sequence 2, Application US/08467603
; Patent No. 5843672
; GENERAL INFORMATION:
; APPLICANT: Morgenstern, Jay P.
; APPLICANT: Kanieczny, Andrzej
; APPLICANT: Bizindauskas, Christine B.
; APPLICANT: Brauer, Andrew W.
; TITLE OF INVENTION: Allergenic Proteins and
; TITLE OF INVENTION: Peptides from Dog
; TITLE OF INVENTION: Dander and Uses Therefor
; NUMBER OF SEQUENCES: 104
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: LAHIVE & COCKFIELD
; STREET: 60 State Street, suite 510
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII-text
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/467,603
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/156,549
; FILING DATE:
; APPLICATION NUMBER: 07/999,712
; FILING DATE: 31-Dec-92
; ATTORNEY/AGENT INFORMATION:
; NAME: Mandragouras, Amy E.
; REGISTRATION NUMBER: 36,207
; REFERENCE/DOCKET NUMBER: IMI-026CP (IPC-048CP)
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 227-7400
; TELEFAX: (617) 227-5941
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 174 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-467-603-2

Query Match 31.2%; Score 244; DB 2; Length 174;
Best Local Similarity 35.7%; Pred. No. 5.1e-22;
Matches 50; Conservative 29; Mismatches 45; Indels 16; Gaps 3;

QY 1 MKTLFLGVTLGLAALSFLEED-----ITGTWYKAMVVDKDFPDRPRKVS 50
Db 1 MKTLLLTIGFSLIA-----ILQADTPALGKDTVAVSGKWYKAMTADQEVPE--KPDSTV 54

QY 51 PVKVTALGGNLEATFTFMREDRCIQKILMRKTEEPKFSAYGGRKLIYLOELPGTDDY 110
Db 55 PMILKAQKGNLEAKITMLTNQCQNTIVLHKTSEPGKYATAYEGQVRVFIQPSVPRDHY 114

QY 111 VFYCKDQRRGRLRYMGLVG 130
Db 115 ILYCEGELHGRQIRMAKLLG 134

RESULT 10
US-08-466-793-2
; Sequence 2, Application US/08466793
; Patent No. 5891716
; GENERAL INFORMATION:
; APPLICANT: Morgenstern, Jay P.
; APPLICANT: Kanieczny, Andrzej

```

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; APPLICANT: Bizindauskas, Christine B.
; APPLICANT: Brauer, Andrew W.
; TITLE OF INVENTION: Allergenic Proteins and
; TITLE OF INVENTION: Peptides from Dog
; TITLE OF INVENTION: Dander and Uses Therefor
; NUMBER OF SEQUENCES: 104
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: LAHIVE & COCKFIELD
; STREET: 60 State Street, suite 510
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII-text
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/466,793
; FILING DATE: 06-JUN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/156,549
; FILING DATE: 22-NOV-1993
; APPLICATION NUMBER: 07/999,712
; FILING DATE: 31-Dec-92
; ATTORNEY/AGENT INFORMATION:
; NAME: Mandragouras, Amy E.
; REGISTRATION NUMBER: 36,207
; REFERENCE/DOCKET NUMBER: IMI-026CP (IPC-048CP)
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 227-7400
; TELEFAX: (617) 227-5941
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 174 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-466-793-2

Query Match 31.2%; Score 244; DB 2; Length 174;
Best Local Similarity 35.7%; Pred. No. 5.1e-22;
Matches 50; Conservative 29; Mismatches 45; Indels 16; Gaps 3;

QY 1 MKTLFLGVTLGLAALSFLEED-----ITGTWYKAMVVDKDFPDRPRKVS 50
Db 1 MKTLLLTIGFSLIA-----ILQADTPALGKDTVAVSGKWYKAMTADQEVPE--KPDSTV 54

QY 51 PVKVTALGGNLEATFTFMREDRCIQKILMRKTEEPKFSAYGGRKLIYLOELPGTDDY 110
Db 55 PMILKAQKGNLEAKITMLTNQCQNTIVLHKTSEPGKYATAYEGQVRVFIQPSVPRDHY 114

QY 111 VFYCKDQRRGRLRYMGLVG 130
Db 115 ILYCEGELHGRQIRMAKLLG 134

RESULT 11
US-08-491-861A-2
; Sequence 2, Application US/08491861A
; Patent No. 5939283
; GENERAL INFORMATION:
; APPLICANT: Morgenstern, Jay P.
; APPLICANT: Kanieczny, Andrzej
; APPLICANT: Bizindauskas, Christine B.
; APPLICANT: Brauer, Andrew W.
; TITLE OF INVENTION: Allergenic Proteins and Peptides from Dog
; TITLE OF INVENTION: Dander and Uses Therefor
; NUMBER OF SEQUENCES: 104
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: LAHIVE & COCKFIELD, LLP

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; STREET: 28 State Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII-text
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/491,861A
; FILING DATE: 27-OCT-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/999,712
; FILING DATE: 31-Dec-92
; ATTORNEY/AGENT INFORMATION:
; NAME: Mandragouras, Amy E.
; REGISTRATION NUMBER: 36,207
; REFERENCE/DOCKET NUMBER: IMI-026CP (IPC-048CP)
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 742-4214
; TELEFAX: (617) 742-4214
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 174 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-491-861A-2

Query Match 31.2%; Score 244; DB 2; Length 174;
Best Local Similarity 35.7%; Pred. No. 5.1e-22;
Matches 50; Conservative 29; Mismatches 45; Indels 16; Gaps 3;

QY 1 MKTFLGVTLGLAALSFTLEED-----ITGTWYVAMVVDKDPEDRRPRKVS 50
Db 1 MKTLLLTIGFSLIA----ILQAQDTPALGKDTVAVSGKWYKAMTADQVPE--KPDST 54

QY 51 PVKVTALGGNLEATFTFMREDRCIQKILMRKTEPGKFSAYGGRKLIYLQELPGTDDY 110
Db 55 PMLKKAQGGNLEAKITMLTNGCQNTITVLHKTSEPGKYTAEGQVVVFIQPSVPRDHY 114

QY 111 VFYCKDQRRGGLRYMGKLVG 130
Db 115 ILYCEGELHGRQIRMAKLLG 134

RESULT 12
US-09-374-671A-2
; Sequence 2, Application US/09374671A
; Patent No. 6489118
; GENERAL INFORMATION:
; APPLICANT: Morgenstern, Jay P.
; APPLICANT: Konieczny, Andrzej
; APPLICANT: Bizindaukas, Christine B.
; APPLICANT: Brauer, Andrew W.
; TITLE OF INVENTION: Allergenic Protein and Peptides from Dog
; Dander and Uses Therefor
; NUMBER OF SEQUENCES: 109
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Amy E. Mandragouras
; STREET: 28 State Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII Text

; STREET: 28 State Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII-text
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/491,861A
; FILING DATE: 27-OCT-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/999,712
; FILING DATE: 31-Dec-92
; ATTORNEY/AGENT INFORMATION:
; NAME: Mandragouras, Amy E.
; REGISTRATION NUMBER: 36,207
; REFERENCE/DOCKET NUMBER: IMI-026CP (IPC-048CP)
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 742-4214
; TELEFAX: (617) 742-4214
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 174 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-491-861A-2

Query Match 31.2%; Score 244; DB 4; Length 174;
Best Local Similarity 35.7%; Pred. No. 5.1e-22;
Matches 50; Conservative 29; Mismatches 45; Indels 16; Gaps 3;

QY 1 MKTFLGVTLGLAALSFTLEED-----ITGTWYVAMVVDKDPEDRRPRKVS 50
Db 1 MKTLLLTIGFSLIA----ILQAQDTPALGKDTVAVSGKWYKAMTADQVPE--KPDST 54

QY 51 PVKVTALGGNLEATFTFMREDRCIQKILMRKTEPGKFSAYGGRKLIYLQELPGTDDY 110
Db 55 PMLKKAQGGNLEAKITMLTNGCQNTITVLHKTSEPGKYTAEGQVVVFIQPSVPRDHY 114

QY 111 VFYCKDQRRGGLRYMGKLVG 130
Db 115 ILYCEGELHGRQIRMAKLLG 134

RESULT 13
US-08-467-603-62
; Sequence 62, Application US/08467603
; Patent No. 5843672
; GENERAL INFORMATION:
; APPLICANT: Morgenstern, Jay P.
; APPLICANT: Kanieczny, Andrzej
; APPLICANT: Bizindaukas, Christine B.
; APPLICANT: Brauer, Andrew W.
; TITLE OF INVENTION: Allergenic Proteins and
; Peptides from Dog
; Dander and Uses Therefor
; NUMBER OF SEQUENCES: 104
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: LAHIVE & COCKFIELD
; STREET: 60 State Street, suite 510
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII-text
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/467,603
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/156,549
; FILING DATE:
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; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/374,671A
; FILING DATE: 16-Aug-1999
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/156,549
; FILING DATE: 1993-NOV-22
; APPLICATION NUMBER: US 07/999,712
; FILING DATE: 1992-DEC-31
; ATTORNEY/AGENT INFORMATION:
; NAME: Digiorgio, Jeanne M.
; REGISTRATION NUMBER: 41,710
; REFERENCE/DOCKET NUMBER: IMI-026C2CNCFA
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 227-7400
; TELEFAX: (617) 742-4214
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 174 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-374-671A-2

Query Match 31.2%; Score 244; DB 4; Length 174;
Best Local Similarity 35.7%; Pred. No. 5.1e-22;
Matches 50; Conservative 29; Mismatches 45; Indels 16; Gaps 3;

QY 1 MKTFLGVTLGLAALSFTLEED-----ITGTWYVAMVVDKDPEDRRPRKVS 50
Db 1 MKTLLLTIGFSLIA----ILQAQDTPALGKDTVAVSGKWYKAMTADQVPE--KPDST 54

QY 51 PVKVTALGGNLEATFTFMREDRCIQKILMRKTEPGKFSAYGGRKLIYLQELPGTDDY 110
Db 55 PMLKKAQGGNLEAKITMLTNGCQNTITVLHKTSEPGKYTAEGQVVVFIQPSVPRDHY 114

QY 111 VFYCKDQRRGGLRYMGKLVG 130
Db 115 ILYCEGELHGRQIRMAKLLG 134

RESULT 13
US-08-467-603-62
; Sequence 62, Application US/08467603
; Patent No. 5843672
; GENERAL INFORMATION:
; APPLICANT: Morgenstern, Jay P.
; APPLICANT: Kanieczny, Andrzej
; APPLICANT: Bizindaukas, Christine B.
; APPLICANT: Brauer, Andrew W.
; TITLE OF INVENTION: Allergenic Proteins and
; Peptides from Dog
; Dander and Uses Therefor
; NUMBER OF SEQUENCES: 104
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: LAHIVE & COCKFIELD
; STREET: 60 State Street, suite 510
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII-text
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/467,603
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/156,549
; FILING DATE:
```

```
; APPLICATION NUMBER: 07/999,712
; FILING DATE: 31-Dec-92
; ATTORNEY/AGENT INFORMATION:
; NAME: Mandragouras, Amy E.
; REGISTRATION NUMBER: 36,207
; REFERENCE/DOCKET NUMBER: IMI-026CP (IPC-048CP)
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 227-7400
; TELEFAX: (617) 227-5941
; INFORMATION FOR SEQ ID NO: 62:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 144 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FRAGMENT TYPE: internal
US-08-467-603-62

Query Match 29.4%; Score 230; DB 2; Length 144;
Best Local Similarity 38.7%; Pred. No. 2.1e-20;
Matches 41; Conservative 26; Mismatches 37; Indels 2; Gaps 1;

Qy 25 ITGTWYVKAMVVDKDFPDRPRKVPVKVTALGGNLEATFTFWREDRCIQKKILMRKT 84
Db 5 VSGKWYKAMTADQVPE--KPDSTVPMILKAKGGNLEAKITMLTNGCQCNITVVLHKT 62
Qy 85 EEPGKFSAYGGRKLIYLQELPGTDDYVFYCKDQRRGGLRYMGKLVG 130
Db 63 SEPGKYATAYEGQVRVFIQSPVRDHYLYCEGELHGRQIRMAKLLG 108

RESULT 14
US-08-466-793-62
; Sequence 62, Application US/08466793
; Patent No. 5891716
; GENERAL INFORMATION:
; APPLICANT: Morgenstern, Jay P.
; APPLICANT: Kanieczny, Andrzej
; APPLICANT: Bizindaukas, Christine B.
; APPLICANT: Brauer, Andrew W.
; TITLE OF INVENTION: Allergenic Proteins and Peptides from Dog
; TITLE OF INVENTION: Peptides from Dog
; TITLE OF INVENTION: Dander and Uses Therefor
; NUMBER OF SEQUENCES: 104
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: LAHIVE & COCKFIELD
; STREET: 60 State Street, suite 510
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII-text
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/466,793
; FILING DATE: 06-JUN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/156,549
; FILING DATE: 22-NOV-1993
; APPLICATION NUMBER: 07/999,712
; FILING DATE: 31-Dec-92
; ATTORNEY/AGENT INFORMATION:
; NAME: Mandragouras, Amy E.
; REGISTRATION NUMBER: 36,207
; REFERENCE/DOCKET NUMBER: IMI-026CP (IPC-048CP)
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 227-7400
; TELEFAX: (617) 227-5941
; INFORMATION FOR SEQ ID NO: 62:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 144 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FRAGMENT TYPE: internal
US-08-467-603-62

Query Match 29.4%; Score 230; DB 2; Length 144;
Best Local Similarity 38.7%; Pred. No. 2.1e-20;
Matches 41; Conservative 26; Mismatches 37; Indels 2; Gaps 1;

Qy 25 ITGTWYVKAMVVDKDFPDRPRKVPVKVTALGGNLEATFTFWREDRCIQKKILMRKT 84
Db 5 VSGKWYKAMTADQVPE--KPDSTVPMILKAKGGNLEAKITMLTNGCQCNITVVLHKT 62
Qy 85 EEPGKFSAYGGRKLIYLQELPGTDDYVFYCKDQRRGGLRYMGKLVG 130
Db 63 SEPGKYATAYEGQVRVFIQSPVRDHYLYCEGELHGRQIRMAKLLG 108

RESULT 15
US-08-491-861A-62
; Sequence 62, Application US/08491861A
; Patent No. 5939283
; GENERAL INFORMATION:
; APPLICANT: Morgenstern, Jay P.
; APPLICANT: Kanieczny, Andrzej
; APPLICANT: Bizindaukas, Christine B.
; APPLICANT: Brauer, Andrew W.
; TITLE OF INVENTION: Allergenic Proteins and Peptides from Dog
; TITLE OF INVENTION: Dander and Uses Therefor
; NUMBER OF SEQUENCES: 104
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: LAHIVE & COCKFIELD, LLP
; STREET: 28 State Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII-text
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/491,861A
; FILING DATE: 27-OCT-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/999,712
; FILING DATE: 31-Dec-92
; ATTORNEY/AGENT INFORMATION:
; NAME: Mandragouras, Amy E.
; REGISTRATION NUMBER: 36,207
; REFERENCE/DOCKET NUMBER: IMI-026CP (IPC-048CP)
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 227-7400
; TELEFAX: (617) 742-4214
; INFORMATION FOR SEQ ID NO: 62:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 144 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FRAGMENT TYPE: internal
US-08-491-861A-62

Query Match 29.4%; Score 230; DB 2; Length 144;
Best Local Similarity 38.7%; Pred. No. 2.1e-20;
Matches 41; Conservative 26; Mismatches 37; Indels 2; Gaps 1;

Qy 25 ITGTWYVKAMVVDKDFPDRPRKVPVKVTALGGNLEATFTFWREDRCIQKKILMRKT 84
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Db 5 VSGKWLKAWTADQEVPE--KDSVTPMILKAKGKNLEAKITMLTNGCQCQNITVVLHKT 62
QY 85 BEFGKFSAYGRKLIYLQELPGCTDDYVFYCKDQRRGGLRYMGKLYG 130
Db 63 SEPGKYTAYEGORVVFIQPSVVRDHYILYCEGELHGRQIRMAKLLG 108

Search completed: June 7, 2005, 14:41:04
Job time : 44 secs

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OM protein - protein search, using sw model

Run on: June 7, 2005, 14:26:40 ; Search time 160 Seconds
(without alignments)
352.919 Million cell updates/sec

Title: US-10-049-372-4
Perfect score: 782
Sequence: 1 MKTLFLGVTLGLAALSFTL.....KLVGPCRPVHGSPGHLTCR 146

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 2105692

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A Geneseq_16Dec04:*
1: geneseqp1980s:*
2: geneseqp1990s:*
3: geneseqp2000s:*
4: geneseqp2001s:*
5: geneseqp2002s:*
6: geneseqp2003as:*
7: geneseqp2003bs:*
8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	782	100.0	146	4	AAB67739 Amino aci
2	687.5	87.9	228	4	AAM78682 Human pro
3	687.5	87.9	228	4	AAB67740 Amino aci
4	679	86.8	170	4	AAB67738 Amino aci
5	646.5	82.7	221	4	ABG11868 Novel hum
6	623	79.7	170	2	AAW99669 Human lip
7	623	79.7	170	2	AAW95641 Human BSI
8	623	79.7	170	3	AAB33450 Human PRO
9	623	79.7	170	3	AAV99389 Human PRO
10	623	79.7	170	4	AAB66138 Protein o
11	623	79.7	170	4	AAB67742 Amino aci
12	623	79.7	170	5	ABB84919 Human PRO
13	623	79.7	170	5	AAB22099 Human ZLI
14	623	79.7	170	5	ABB95525 Human ang
15	623	79.7	170	6	ABO33631 Novel hum
16	623	79.7	170	7	ABO44484 Human sec
17	623	79.7	170	7	ABO33508 Novel hum
18	623	79.7	170	7	ADC18031 Human PRO
19	623	79.7	170	7	ADD10495 Human sec
20	623	79.7	170	7	ADD11455 Human sec
21	623	79.7	170	7	ADD70677 Human sec
22	623	79.7	170	7	ADD39754 Human sec
23	623	79.7	170	7	ADD70200 Human sec
24	623	79.7	170	7	ADD37248 Human sec
25	623	79.7	170	7	ADD38321 Human sec

ALIGNMENTS

RESULT 1

AAB67739
ID AAB67739 standard; protein; 146 AA.

XX AC AAB67739;

XX DT 11-JUN-2001 (first entry)

XX DE Amino acid sequence of odorant binding polypeptide OBPIIa-beta.

XX KW Odorant binding polypeptide; OBP; hydrophobic ligand; odorant; allergy;
XX KW asthma; cancer; perfume; hyperlipidemia; obesity; food additive;
XX KW anticancer; foetus detoxification; pregnancy marker.

XX OS Homo sapiens.

XX PN WO200112806-A2.

XX PD 22-FEB-2001.

XX PF 11-AUG-2000; 2000WO-FR002319.

XX PR 12-AUG-1999; 99FR-00010439.

XX PA (UYAU-) UNIV AUVERGNE.

XX PA (PITI/) PITIOT G.

XX PI Pitiot G, Lacazette E, Gachon F;

XX DR WPI; 2001-202864/20.

XX DR N-PSDB; AAF80040.

XX XX New human odorant-binding proteins, useful for solubilizing lipophilic compounds in the transportation of anticancer agents or for slow release of perfumes.

XX PS Claim 2; Page 109; 132pp; French.

XX CC The present sequence represents a human odorant binding polypeptide (OBP), designated OBPIIa-beta. OBPs provide long-term retention (gradual release) of lipophilic compounds, so prolong the 'hold' of perfumes, deodorants etc. . OBP polypeptides are used as binding proteins for hydrophobic ligands (particularly odorants); as competitive inhibitors (agonists or antagonists) of cellular lipocalcin receptors; to detect specific antibodies for diagnosis of allergy, asthma or cancer; for controlling volatilisation of an odorant, specifically in perfumes, cosmetics or disinfectant compositions; to screen compounds, especially odorants or flavours, e.g. human pheromones, for binding to OBP, also in

Add39277 Human sec
Add38800 Human sec
Add40231 Human sec
Ade50452 Human sec
Ade20064 Human sec
Ade49975 Human sec
Ade21533 Human sec
Adf29958 Human sec
Adf55851 Human sec
Adh99355 Human sec
Ade41456 Human sec
Ade96535 Human sec
Adf25846 Human sec
Adf24745 Human sec
Adf29481 Human sec
Ade97012 Human sec
Adh03050 Human sec
Adh04004 Human sec
Adh03527 Human sec
Adh43639 Human PRO

CC analysis of complex perfume mixtures; to solubilise lipophilic compounds;
 CC for treating hyperlipidemia or obesity, or to supplement non-maternal
 CC milk when combined with nutritional fatty acids, as food additives; as a
 CC transporter of pharmaceuticals, especially anticancer agents (providing
 CC delayed release) but also for delivery across the placental barrier (e.g.
 CC for detoxification of the foetus); as a marker of pregnancy or foeto-
 CC placental pathology (rupture of the amniotic membrane); and as
 CC antiallergic agents
 XX
 SQ Sequence 146 AA;

Query Match 100.0%; Score 782; DB 4; Length 146;
 Best Local Similarity 100.0%; Pred. No. 9.8e-85;
 Matches 146; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MKTLFLGVTGLAAALSFTLEEDITGTWYKAMVVDKFPEDRRPRKVPKVTALGGG 60
 Db 1 MKTLFLGVTGLAAALSFTLEEDITGTWYKAMVVDKFPEDRRPRKVPKVTALGGG 60
 QY 61 NLEATFTFMREDRCIOKKILMRKTEEPKFSAYGGRKLIYQLPGTDDYVYCKDQRRG 120
 Db 61 NLEATFTFMREDRCIOKKILMRKTEEPKFSAYGGRKLIYQLPGTDDYVYCKDQRRG 120
 QY 121 GLRYMGKLVGPCRCPHVSGPHLTCT 146
 Db 121 GLRYMGKLVGPCRCPHVSGPHLTCT 146

RESULT 2
 AAM78682
 ID AAM78682 standard; protein; 228 AA.
 XX
 AC AAM78682;
 XX
 DT 06-NOV-2001 (first entry)
 DE Human protein SEQ ID NO 1344.
 XX
 KW Human; cytokine; cell proliferation; cell differentiation; gene therapy;
 KW vaccine; peptide therapy; stem cell growth factor; haematopoiesis;
 KW tissue growth factor; immunomodulatory; cancer; leukaemia;
 KW nervous system disorder; arthritis; inflammation.
 XX
 OS Homo sapiens.
 XX
 PN WO200157190-A2.
 XX
 PD 09-AUG-2001.
 XX
 PF 05-FEB-2001; 2001WO-US004098.
 XX
 PR 03-FEB-2000; 2000US-00496914.
 PR 27-APR-2000; 2000US-00560875.
 PR 20-JUN-2000; 2000US-00598075.
 PR 19-JUL-2000; 2000US-00620325.
 PR 01-SEP-2000; 2000US-00654936.
 PR 15-SEP-2000; 2000US-00663561.
 PR 20-OCT-2000; 2000US-00693325.
 PR 30-NOV-2000; 2000US-00728422.
 XX
 PA (HYSE-) HYSEQ INC.

XX
 PI Tang YT, Liu C, Drmanac RT, Asundi V, Zhou P, Xu C, Cao Y;
 PI Ma Y, Zhao QA, Wang D, Wang J, Zhang J, Ren F, Chen R, Wang ZW;
 PI Xue AJ, Yang Y, Wejhrman T, Goodrich R;
 XX
 DR WPI; 2001-476283/51.
 DR N-PSDB; AAK51815.
 XX
 PT Nucleic acids encoding polypeptides with cytokine-like activities, useful
 PT in diagnosis and gene therapy.
 XX
 PS Claim 20; Page 3588; 6221pp; English.

XX
 CC The invention relates to polynucleotides (AAK51456-AAK53435) and the
 CC encoded polypeptides (AAM78323-AAW80302) that exhibit activity elating to
 CC cytokine, cell proliferation or cell differentiation or which may induce
 CC production of other cytokines in other cell populations. The
 CC polynucleotides and polypeptides are useful in gene therapy, vaccines or
 CC peptide therapy. The polypeptides have various cytokine-like activities,
 CC e.g. stem cell growth factor activity, haematopoiesis regulating
 CC activity, tissue growth factor activity, immunomodulatory activity and
 CC activin/inhibin activity and may be useful in the diagnosis and/or
 CC treatment of cancer, leukaemia, nervous system disorders, arthritis and
 CC inflammation. Note: Records for SEQ ID NO 2110 (AAK52581), 2111
 CC (AAK52582) and 3666 (AAM80020) are omitted as the relevant pages from the
 CC sequence listing were missing at the time of publication
 XX

SQ Sequence 228 AA;
 Query Match 87.9%; Score 687.5; DB 4; Length 228;
 Best Local Similarity 93.2%; Pred. No. 3.4e-73;
 Matches 136; Conservative 1; Mismatches 6; Indels 3; Gaps 2;
 QY 1 MKTLFLGVTGLAAALSFTLEEDITGTWYKAMVVDKFPEDRRPRKVPKVTALGGG 60
 Db 1 MKTLFLGVTGLAAALSFTLEEDITGTWYKAMVVDKFPEDRRPRKVPKVTALGGG 60
 QY 61 NLEATFTFMREDRCIOKKILMRKTEEPKFSAYGGRKLIYQLPGTDDYVYCKDQRRG 120
 Db 61 NLEATFTFMREDRCIOKKILMRKTEEPKFSAYGGRKLIYQLPGTDDYVYCKDQRRG 120
 QY 121 GLRYMGKLV--GPCRCPHVSGPHLT 144
 Db 121 GLRYMGKLVASAPCAVPL-SPRLT 145

RESULT 3
 AAB67740
 ID AAB67740 standard; protein; 228 AA.
 XX
 AC AAB67740;
 XX
 DT 11-JUN-2001 (first entry)
 DE Amino acid sequence of odorant binding polypeptide OBPIIa-gamma.
 XX
 KW Odorant binding polypeptide; OBP; hydrophobic ligand; odorant; allergy;
 KW asthma; cancer; perfume; hyperlipidemia; obesity; food additive;
 KW anticancer; foetus detoxification; pregnancy marker.
 XX
 OS Homo sapiens.
 XX
 PN WO200112806-A2.
 XX
 PD 22-FEB-2001.
 XX
 PF 11-AUG-2000; 2000WO-FR002319.
 XX
 PR 12-AUG-1999; 99FR-00010439.
 XX
 PA (UYAU-) UNIV AUVERGNE.
 PA (PITI/) PITIOT G.

XX
 PI Pitiot G, Lacazette E, Gachon F;
 XX
 DR WPI; 2001-202864/20.
 DR N-PSDB; AAF80041.
 XX
 PT New human odorant-binding proteins, useful for solubilizing lipophilic
 PT compounds in the transportation of anticancer agents or for slow release
 PT of perfumes.
 XX
 PS Claim 2; Page 111; 132pp; French.
 XX
 CC The present sequence represents a human odorant binding polypeptide

CC (OBP), designated OBPIIa-gamma. OBPs provide long-term retention (gradual
 CC release) of lipophilic compounds, so prolong the 'hold' of perfumes,
 CC deodorants etc. . OBP polypeptides are used as binding proteins for
 CC hydrophobic ligands (particularly odorants); as competitive inhibitors
 CC (agonists or antagonists) of cellular lipocalcin receptors; to detect
 CC specific antibodies for diagnosis of allergy, asthma or cancer; for
 CC controlling volatilisation of an odorant, specifically in perfumes,
 CC cosmetics or disinfectant compositions; to screen compounds, especially
 CC odorants or flavours, e.g. human pheromones, for binding to OBP, also in
 CC analysis of complex perfume mixtures; to solubilise lipophilic compounds;
 CC for treating hyperlipidemia or obesity, or to supplement non-maternal
 CC milk when combined with nutritional fatty acids, as food additives; as a
 CC transporter of pharmaceuticals, especially anticancer agents (providing
 CC delayed release) but also for delivery across the placental barrier (e.g.
 CC for detoxification of the foetus); as a marker of pregnancy or foeto-
 CC placental pathology (rupture of the amniotic membrane); and as
 CC antiallergic agents
 XX
 SQ Sequence 228 AA;

Query Match 87.9%; Score 687.5; DB 4; Length 228;
 Best Local Similarity 93.2%; Pred. No. 3.4e-73;
 Matches 136; Conservative 1; Mismatches 6; Indels 3; Gaps 2;
 QY 1 MKTLFLGVTLGLAALSFLEEDITGTWYKAMVVDKDFEDRRPRKVPVKVTALGGG 60
 DB 1 MKTLFLGVTLGLAALSFLEEDITGTWYKAMVVDKDFEDRRPRKVPVKVTALGGG 60
 QY 61 NLEATFTFMRDRCIQKKILMRKTEEPGKFSAYGGRKLIYLQELPGTDDYFYCKDQRRG 120
 DB 61 NLEATFTFMRDRCIQKKILMRKTEEPGKFSAYGGRKLIYLQELPGTDDYFYCKDQRRG 120
 QY 121 GLRYMGKLV--GPCRCPHVGSPGHLT 144
 DB 121 GLRYMGKLVASAPCRAVPL-SPRRLT 145

RESULT 4
 AAB67738
 ID AAB67738 standard; protein; 170 AA.
 AC AAB67738;
 XX
 DT 11-JUN-2001 (first entry)
 XX
 DE Amino acid sequence of odorant binding polypeptide OBPIIa-alpha.
 XX
 KW Odorant binding polypeptide; OBP: hydrophobic ligand; odorant; allergy;
 KW asthma; cancer; perfume; hyperlipidemia; obesity; food additive;
 KW anticancer; foetus detoxification; pregnancy marker.
 XX
 OS Homo sapiens.
 XX
 PN WO200112806-A2.
 XX
 PD 22-FEB-2001.
 XX
 PF 11-AUG-2000; 2000WO-FR002319.
 XX
 PR 12-AUG-1999; 99FR-00010439.
 XX
 PA (UYAU-) UNIV AUVERGNE.
 PA (PITI/) PITIOT G.
 XX
 PI Pitiot G, Lacazette E, Gachon F;
 XX
 DR WPI; 2001-202864/20.
 DR N-PSDB; AAF80039.
 XX
 XX New human odorant-binding proteins, useful for solubilizing lipophilic
 PT compounds in the transportation of anticancer agents or for slow release
 PT of perfumes.
 XX

Claim 2; Page 107; 132pp; French.

XX The present sequence represents a human odorant binding polypeptide
 CC (OBP), designated OBPIIa-alpha. OBPs provide long-term retention (gradual
 CC release) of lipophilic compounds, so prolong the 'hold' of perfumes,
 CC deodorants etc. . OBP polypeptides are used as binding proteins for
 CC hydrophobic ligands (particularly odorants); as competitive inhibitors
 CC (agonists or antagonists) of cellular lipocalcin receptors; to detect
 CC specific antibodies for diagnosis of allergy, asthma or cancer; for
 CC controlling volatilisation of an odorant, specifically in perfumes,
 CC cosmetics or disinfectant compositions; to screen compounds, especially
 CC odorants or flavours, e.g. human pheromones, for binding to OBP, also in
 CC analysis of complex perfume mixtures; to solubilise lipophilic compounds;
 CC for treating hyperlipidemia or obesity, or to supplement non-maternal
 CC milk when combined with nutritional fatty acids, as food additives; as a
 CC transporter of pharmaceuticals, especially anticancer agents (providing
 CC delayed release) but also for delivery across the placental barrier (e.g.
 CC for detoxification of the foetus); as a marker of pregnancy or foeto-
 CC placental pathology (rupture of the amniotic membrane); and as
 CC antiallergic agents
 XX
 SQ Sequence 170 AA;

Query Match 86.8%; Score 679; DB 4; Length 170;
 Best Local Similarity 100.0%; Pred. No. 2.4e-72;
 Matches 130; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MKTLFLGVTLGLAALSFLEEDITGTWYKAMVVDKDFEDRRPRKVPVKVTALGGG 60
 DB 1 MKTLFLGVTLGLAALSFLEEDITGTWYKAMVVDKDFEDRRPRKVPVKVTALGGG 60
 QY 61 NLEATFTFMRDRCIQKKILMRKTEEPGKFSAYGGRKLIYLQELPGTDDYFYCKDQRRG 120
 DB 61 NLEATFTFMRDRCIQKKILMRKTEEPGKFSAYGGRKLIYLQELPGTDDYFYCKDQRRG 120
 QY 121 GLRYMGKLVG 130
 DB 121 GLRYMGKLVG 130

RESULT 5
 ABG11868
 ID ABG11868 standard; protein; 221 AA.
 AC ABG11868;
 XX
 DT 18-FEB-2002 (first entry)
 XX
 DE Novel human diagnostic protein #11859.
 XX
 KW Human; chromosome mapping; gene mapping; gene therapy; forensic;
 KW food supplement; medical imaging; diagnostic; genetic disorder.
 XX
 OS Homo sapiens.
 XX
 PN WO200175067-A2.
 XX
 PD 11-OCT-2001.
 XX
 PF 30-MAR-2001; 2001WO-US008631.
 XX
 PR 31-MAR-2000; 2000US-00540217.
 PR 23-AUG-2000; 2000US-00649167.
 XX
 PA (HYSE-) HYSEQ INC.
 XX
 PI Drmanac RT, Liu C, Tang YT;
 XX
 DR WPI; 2001-619162/73.
 DR N-PSDB; AAS76055.
 XX
 XX New isolated polynucleotide and encoded polypeptides, useful in
 PT diagnostics, forensics, gene mapping, identification of mutations
 PT

PT responsible for genetic disorders or other traits and to assess
PT biodiversity.

PS Claim 20; SEQ ID NO 42227; 103pp; English.

XX The invention relates to isolated polynucleotide (I) and polypeptide (II)
CC sequences. (I) is useful as hybridisation probes, polymerase chain
CC reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
CC and in recombinant production of (II). The polynucleotides are also used
CC in diagnostics as expressed sequence tags for identifying expressed
CC genes. (I) is useful in gene therapy techniques to restore normal
CC activity of (II) or to treat disease states involving (II). (II) is
CC useful for generating antibodies against it, detecting or quantitating a
CC polypeptide in tissue, as molecular weight markers and as a food
CC supplement. (II) and its binding partners are useful in medical imaging
CC of sites expressing (II). (I) and (II) are useful for treating disorders
CC involving aberrant protein expression or biological activity. The
CC polypeptide and polynucleotide sequences have applications in
CC diagnostics, forensics, gene mapping, identification of mutations
CC responsible for genetic disorders or other traits to assess biodiversity
CC and to produce other types of data and products dependent on DNA and
CC amino acid sequences. ABG0010-ABG30377 represent novel human diagnostic
CC amino acid sequences of the invention. Note: The sequence data for this
CC patent did not appear in the printed specification, but was obtained in
CC electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 221 AA;

Query Match 82.7%; Score 646.5; DB 4; Length 221;

Best Local Similarity 84.8%; Pred. No. 2.6e-68;

Matches 128; Conservative 1; Mismatches 1; Indels 21; Gaps 1;

QY 1 MKTFLGVTLGLAALSFTLEEDITGTWYKAMVVDKDFEDRRPRKVPVKVTALGGG 60

Db 1 MKTFLGVTLGLAALSFTLEEDITGTWYKAMVVDKDFEDRRPRKVPVKVTALGGG 60

QY 61 NLEATFTFMREDRCIOKKILMRKTEEPGKFSAY-----GGRKLI 99

Db 61 NLEATFTFMREDRCIOKKILMRKTEEPGKYSACEPLPDPPLMPNPGCTSPADGGRKLI 120

QY 100 YLQELPGTDDVYFYCKDQRRGLRYMGKLVG 130

Db 121 YLQELPGTDDVYFYCKDQRRGLRYMGKLVG 151

RESULT 6

AAW99669

ID AAW99669 standard; protein; 170 AA.

XX AC AAW99669;

DT 07-JUN-1999 (first entry)

DE Human lipocalin homologue zlipol protein SEQ ID NO.2.

XX Human; lipocalin; testis; mammary gland; breast tumour; zlipol;
KW breast cancer; emphysema; skin disease; reproduction; anti-inflammatory;
KW antimicrobial.

XX OS Homo sapiens.

XX PN WO9907740-A2.

XX PD 18-FEB-1999.

XX PF 06-AUG-1998; 98WO-US016425.

XX PR 06-AUG-1997; 97US-0054867P.

XX PA (ZYMO) ZYMOGENETICS INC.

XX PI Conklin DC;

XX WPI; 1999-167367/14.
DR N-PSDB; AAX19505.

XX New lipocalin homologue designated zlipol - whose expression is
PT restricted to testis and mammary gland tissues, particularly breast
PT tumour tissue, used to, e.g. predict tumour aggressiveness.

XX Claim 12; Page 83-84; 94pp; English.

CC The present sequence represents a human lipocalin homologue, designated
CC zlipol. The lipocalin homologue, zlipol, is specifically expressed in
CC testis and mammary gland, particularly breast tumour tissue. Based on
CC this tissue distribution, zlipol may be used as a diagnostic for breast
CC carcinomas and as a tool for predicting tumour aggressiveness. Agonists
CC can be used for transportation of small hydrophobic molecules either in
CC vivo or in vitro, and so are useful in specifically promoting the growth
CC and/or development of testis-specific cell lineages in culture. Zlipol
CC can be used to identify inhibitors. Zlipol proteins can also be used to
CC prepare antibodies (which can be linked to toxins), and can serve as
CC immunogens. Zlipol proteins can be used as a delivery and encapsulation
CC system to transport and/or stabilise small lipophilic molecules, e.g. to
CC protect from gut pH and digestive enzymes. They can also be used to bind
CC small fatty acids in blood or tissues to modulate their biological
CC function, e.g. to transport retinoids or steroids to receptors, in
CC particular as therapy for breast cancer, emphysema and diseases of the
CC skin. They may also play an important role in reproduction. Other uses
CC include anti-inflammatory responses, and antimicrobial activities. Zlipol
CC nucleic acid sequences may be used for gene therapy to increase or
CC inhibit zlipol activity, to derive probes and primers, to derive
CC antisense sequences, and to detect genetic abnormalities

XX SQ Sequence 170 AA;

Query Match 79.7%; Score 623; DB 2; Length 170;

Best Local Similarity 91.5%; Pred. No. 1.2e-65;

Matches 119; Conservative 4; Mismatches 7; Indels 0; Gaps 0;

QY 1 MKTFLGVTLGLAALSFTLEEDITGTWYKAMVVDKDFEDRRPRKVPVKVTALGGG 60

Db 1 MKTFLGVTLGLAALSFTLEEDITGTWYKAMVVDKDFEDRRPRKVPVKVTALGGG 60

QY 61 NLEATFTFMREDRCIOKKILMRKTEEPGKFSAYGGRKLIYLOELPGTDDVYFYCKDQRRG 120

Db 61 KLEATFTFMREDRCIOKKILMRKTEEPGKYSAYGGRKLIYLOELPRRDHYFYCKDQHHG 120

RESULT 7

AAW95641

ID AAW95641 standard; protein; 170 AA.

XX AC AAW95641;

XX 08-JUN-1999 (first entry)

DE Human BS124 specific epitope.

XX BS124; breast; cancer; detection; diagnosis; prevention; treatment;
KW epitope.

XX OS Homo sapiens.

XX PN WO9859049-A1.

XX PD 30-DEC-1998.

XX PF 19-JUN-1998; 98WO-US012862.

XX PR 20-JUN-1997; 97US-00879354.

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XX (ABBO ) ABBOTT LAB.
PA
XX
XX Billing-Medel PA, Cohen M, Colpitts TL, Friedman PN, Gordon J;
PI Granados EN, Hodges SC, Klass MR, Kratochvil JD, Russell JC;
PI Scheffel CP, Stroupe SD, Yu H;
XX
XX WPI; 1999-105623/09.
XX
XX New isolated BS124 polynucleotides and polypeptides - used for detecting,
PT diagnosing, preventing or treating diseases or conditions of the breast,
PT such as breast cancer.
XX
XX Disclosure; Page 98-99; 125pp; English.
XX
XX The sequence is that of a BS124-specific epitope. It is useful for
CC detecting, diagnosing, staging, preventing or treating, or determining
CC predisposition to diseases or conditions of the breast, such as breast
CC cancer
XX
XX Sequence 170 AA;
SQ
Query Match 79.7%; Score 623; DB 2; Length 170;
Best Local Similarity 91.5%; Pred. No. 1.2e-65;
Matches 119; Conservative 4; Mismatches 7; Indels 0; Gaps 0;
QY 1 MKTFLGVTLGAAALSTLEEDITGTWYKAMVVDKDFEDRPRKVSPIKVTALGGG 60
DB 1 MKTFLGVTLGAAALSTLEEDITGTWYKAMVVDKDFEDRPRKVSPIKVTALGGG 60
-QY 61 NLEATFTFMREDRCIQKILMKRTEPGKFSAYGGRKLIYLOELPGTDYFYCKDQRRG 120
DB 61 KLEATFTFMREDRCIQKILMKRTEPGKFSAYGGRKLIYLOELPRRDHYIIFYCKDQHHG 120
QY 121 GLRYMGKLVG 130
DB 121 GLLHMGKLVG 130
RESULT 8
AAB33450
ID AAB33450 standard; protein; 170 AA.
XX
AC AAB33450;
XX
XX 29-JAN-2001 (first entry)
XX
XX Human PRO1283 protein UNQ653 SEQ ID NO:170.
XX
XX Human; immune related disease; diagnosis; antiinflammatory; cardiant;
KW dermatological; antiarthritic; antiirheumatic; immunosuppressive;
KW haenostatic; antithyroid; antidiabetic; nootropic; neuroprotective;
KW antianaemic; hepatotropic; viricide; antipsoriatic; antiallergic;
KW osteoarthritis; systemic lupus erythematosus; rheumatoid arthritis;
KW idiopathic inflammatory myopathy; Sjogren's syndrome; sarcoidosis;
KW systemic vasculitis; autoimmune haemolytic anaemia; diabetes mellitus;
KW autoimmune thrombocytopaenia; immune-mediated renal disease;
KW demyelinating disease; hepatobiliary disease; Whipple's disease;
KW inflammatory bowel disease; gluten-sensitive enteropathy;
KW autoimmune disease; immune-mediated skin disease; allergic disease;
KW immunological disease; transplantation associated disease;
KW graft rejection; graft-versus-host-disease.
XX
XX Homo sapiens.
OS
XX
XX WO200053758-A2.
PN
XX
XX 14-SEP-2000.
PD
XX
XX 02-MAR-2000; 2000WO-US005841.
XX
XX 08-MAR-1999; 99WO-US005028.
PR

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PR 10-MAR-1999; 99US-0123618P.
PR 12-MAR-1999; 99US-0123957P.
PR 23-MAR-1999; 99US-0125775P.
PR 12-APR-1999; 99US-0128849P.
PR 20-APR-1999; 99WO-US008615.
PR 28-APR-1999; 99US-0131445P.
PR 04-MAY-1999; 99US-0132371P.
PR 14-MAY-1999; 99US-0134287P.
PR 02-JUN-1999; 99WO-US012252.
PR 23-JUN-1999; 99US-0141037P.
PR 20-JUL-1999; 99US-0144758P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-OCT-1999; 99US-0162506P.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030999.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
XX
XX (GETH ) GENENTECH INC.
PA
XX
XX Ashkenazi AJ, Baker KP, Goddard A, Gurney AL, Hebert C, Henzel W;
PI Kabakoff RC, Lu Y, Pan J, Pennica D, Shelton DL, Smith V;
PI Stewart TA, Tumas D, Watanabe CK, Wood WI, Yan M;
XX
XX WPI; 2000-572271/53.
DR N-PSDB; AAC58615.
XX
XX Sixty four PRO polypeptides, useful in the diagnosis and treatment of
PT immune related disorders, e.g. systemic lupus erythematosus, rheumatoid
PT arthritis, osteoarthritis, thyroiditis and diabetes mellitus.
XX
XX Claim 33; Fig 74; 309pp; English.
XX
XX The present invention describes sixty four human PRO proteins which can
CC be used in the treatment of immune related diseases. The human PRO
CC proteins, anti-PRO antibodies, agonists and antagonists are useful for
CC treating and diagnosing immune related disorders. The disorders are
CC selected from systemic lupus erythematosus, rheumatoid arthritis,
CC osteoarthritis, juvenile chronic arthritis, spondyloarthropathies,
CC systemic sclerosis, idiopathic inflammatory myopathies, Sjogren's
CC syndrome, systemic vasculitis, sarcoidosis, autoimmune haemolytic
CC anaemia, autoimmune thrombocytopaenia, thyroiditis, diabetes mellitus,
CC immune-mediated renal disease, demyelinating diseases of the central and
CC peripheral nervous systems, hepatobiliary diseases, inflammatory bowel
CC disease, gluten-sensitive enteropathy and Whipple's disease, autoimmune
CC or immune-mediated skin diseases, allergic diseases, immunological
CC diseases of the lung, and transplantation associated diseases including
CC graft rejection and graft-versus-host-disease. AAC58397 to AAC58578
CC represent PCR primers and hybridisation probes used in the isolation of
CC human PRO sequences. AAC58579 to AAC58642 and AAB33414 to AAB33477
CC represent human PRO polynucleotide and protein sequences given in the
CC exemplification of the present invention

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XX	SQ	Sequence 170 AA;
	Query Match	79.7%; Score 623; DB 3; Length 170;
	Best Local Similarity	91.5%; Pred. No. 1.2e-65;
	Matches 119; Conservative	4; Mismatches 7; Indels 0; Gaps 0;
Qy	1 MKTFLGLVTLGLAALSGFTLSEEDITGTWYVKAMVVDKDFPEDRRPRKVSPVKVTALGGG	60
Dd	1 MKTFLGLVTLGLAALSGFTLSEEDITGTWYVKAMVVDKDFPEDRRPRKVSPVKVTALGGG	60
Qy	61 NLEATFTFMREDRCIOKKILMRKTEEPKFSAYGGRKLIVLOELPGTDYDYFYCKDQRG	120
Dd	61 KLEATFTFMREDRCIOKKILMRKTEEPKFSAYGGRKLIVLOELPDRDHYIFYCKDQHGG	120
Qy	121 GLRYMGKLVG 130	
Dd	121 GLLHWGKLVG 130	
RESULT 9		
AAY99389		
ID	AAY99389 standard; protein; 170 AA.	
XX	AC AAY99389;	
XX		
DT	08-AUG-2000 (first entry)	
XX		
DE	Human PRO1283 (UNQ653) amino acid sequence SEQ ID NO:162.	
XX		
KW	Human; PRO polypeptide; membrane bound protein; receptor; diagnosis;	
KW	transmembrane; secretion; immunoadhesion; pharmaceutical; screening.	
OS	Homo sapiens.	
XX		
FN	WO200012708-A2.	
XX		
*PD	09-MAR-2000.	
PF	01-SEP-1999; 99WO-USO20111.	
XX		
PR	01-SEP-1998; 98US-0098716P.	
PR	01-SEP-1998; 98US-0098749P.	
PR	01-SEP-1998; 98US-0098750P.	
PR	02-SEP-1998; 98US-0098803P.	
PR	02-SEP-1998; 98US-0098821P.	
PR	02-SEP-1998; 98US-0098843P.	
PR	09-SEP-1998; 98US-0099536P.	
PR	09-SEP-1998; 98US-0099562P.	
PR	09-SEP-1998; 98US-0099598P.	
PR	09-SEP-1998; 98US-0099602P.	
PR	09-SEP-1998; 98US-0099642P.	
PR	10-SEP-1998; 98US-0099741P.	
PR	10-SEP-1998; 98US-0099754P.	
PR	10-SEP-1998; 98US-0099763P.	
PR	10-SEP-1998; 98US-0099792P.	
PR	10-SEP-1998; 98US-0099808P.	
PR	10-SEP-1998; 98US-0099815P.	
PR	10-SEP-1998; 98US-0099816P.	
PR	15-SEP-1998; 98US-0100385P.	
PR	15-SEP-1998; 98US-0100388P.	
PR	15-SEP-1998; 98US-0100390P.	
PR	16-SEP-1998; 98US-0100584P.	
PR	16-SEP-1998; 98US-0100627P.	
PR	16-SEP-1998; 98US-0100661P.	
PR	16-SEP-1998; 98US-0100662P.	
PR	16-SEP-1998; 98US-0100664P.	
PR	17-SEP-1998; 98US-0100683P.	
PR	17-SEP-1998; 98US-0100684P.	
PR	17-SEP-1998; 98US-0100710P.	
PR	17-SEP-1998; 98US-0100711P.	
PR	17-SEP-1998; 98US-0100919P.	

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PR 17-NOV-1998; 98US-0108775P.
PR 17-NOV-1998; 98US-0108779P.
PR 17-NOV-1998; 98US-0108787P.
PR 17-NOV-1998; 98US-0108788P.
PR 17-NOV-1998; 98US-0108801P.
PR 17-NOV-1998; 98US-0108802P.
PR 17-NOV-1998; 98US-0108806P.
PR 17-NOV-1998; 98US-0108807P.
PR 17-NOV-1998; 98US-0108867P.
PR 17-NOV-1998; 98US-0108925P.
PR 18-NOV-1998; 98US-0108848P.
PR 18-NOV-1998; 98US-0108849P.
PR 18-NOV-1998; 98US-0108850P.
PR 18-NOV-1998; 98US-0108851P.
PR 18-NOV-1998; 98US-0108852P.
PR 18-NOV-1998; 98US-0108858P.
PR 18-NOV-1998; 98US-0108904P.
XX
XX (GETH ) GENENTECH INC.
XX
XX Baker K, Goddard A, Gurney AL, Smith V, Watanabe CK, Wood WI;
XX PI WPI; 2000-237871/20.
XX DR N-PSDB; AAA37071.
XX
XX New mammalian DNA sequences encoding transmembrane, receptor or secreted
iPT PRO polypeptides, useful for screening of potential peptide or small
PT molecule inhibitors of the relevant receptor/ligand interactions.
XX
XX Claim 12; Fig 100; 773pp; English.
XX
XX AAA37022 to AAA37144 encode the new isolated human transmembrane,
CC receptor or secreted PRO polypeptides given in AA199340 to AA199462. The
CC transmembrane and receptor PRO proteins can be used for screening of
CC potential peptide or small molecule inhibitors of the relevant
CC receptor/ligand interactions. The polypeptides and nucleotide sequences
CC encoding them have various industrial applications, including uses as
CC pharmaceutical and diagnostic agents. AAA37145 to AAA37330 represent PCR
CC primers and hybridisation probes used in the isolation of the PRO
CC polypeptides from the present invention
XX
XX Sequence 170 AA;
SQ
Query Match 79.7%; Score 623; DB 3; Length 170;
Best Local Similarity 91.5%; Pred. NO. 1.2e-65;
Matches 119; Conservative 4; Mismatches 7; Indels 0; Gaps 0;
QY 1 MKTLFLGVTLGLAAALSFTLEEDITGTWYVKAMVVDKDFPEDRRPRKVSPIKVTALGGG 60
Db 1 MKTLFLGVTLGLAAALSFTLEEDITGTWYVKAMVVDKDFPEDRRPRKVSPIKVTALGGG 60
QY 61 NLEATFTFMRDRCIOKKILMRKTEEPGKFSAYGGRKLIYLOELPGTDDYVFYCKDORRG 120
Db 61 KLEATFTFMRDRCIOKKILMRKTEEPGKFSAYGGRKLIYLOELPRDRHYIFYCKDQHHG 120
QY 121 GLRYMGKLVG 130
Db 121 GLLHMGKLVG 130
RESULT 10
AAB66138
ID AAB66138 standard; protein; 170 AA.
XX
XX AAB66138;
XX
XX 02-APR-2001 (first entry)
XX
XX Protein of the invention #50.
XX
XX Secreted; transmembrane; gene therapy.
XX
XX Unidentified.
OS

XX WO200078961-A1.
XX PN
XX 28-DEC-2000.
XX PD
XX
XX 18-FEB-2000; 2000WO-US004342.
XX PF
XX
XX 23-JUN-1999; 99US-0141037P.
XX PR 20-JUL-1999; 99US-0144758P.
XX PR 26-JUL-1999; 99US-0145698P.
XX PR 01-SEP-1999; 99WO-US020111.
XX PR 29-OCT-1999; 99US-0162506P.
XX PR 30-NOV-1999; 99WO-US028313.
XX PR 02-DEC-1999; 99WO-US028551.
XX PR 16-DEC-1999; 99WO-US030095.
XX PR 05-JAN-2000; 2000WO-US000219.
XX PR 06-JAN-2000; 2000WO-US000376.
XX
XX (GETH ) GENENTECH INC.
XX
XX Baker KP, Botstein D, Desnovers L, Eaton DL, Ferrara N, Fong S;
XX PI Gao W, Goddard A, Godowski RJ, Grimaldi CJ, Gurney AL, Hillan KJ;
XX PI Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe CK;
XX PI Williams PM, Wood WI;
XX
XX WPI; 2001-071395/08.
XX
XX Secreted and transmembrane proteins and nucleic acids designated PRO,
PT useful as hybridization probes, in chromosome and gene mapping and gene
PT therapy.
XX
XX Claim 1; Fig 100; 787pp; English.
XX
XX The present invention relates to secreted and transmembrane proteins.
XX These proteins and the DNA encoding them may be used as hybridization
CC probes, in chromosome and gene mapping and in the generation of anti-
CC sense RNA and DNA. They may also be used to generate either
CC transgenic animals or knockout animals which are in turn useful for
CC development and screening of therapeutically useful reagents. The nucleic
CC acids may also be used in gene therapy
XX
XX Sequence 170 AA;
SQ
Query Match 79.7%; Score 623; DB 4; Length 170;
Best Local Similarity 91.5%; Pred. No. 1.2e-65;
Matches 119; Conservative 4; Mismatches 7; Indels 0; Gaps 0;
QY 1 MKTLFLGVTLGLAAALSFTLEEDITGTWYVKAMVVDKDFPEDRRPRKVSPIKVTALGGG 60
Db 1 MKTLFLGVTLGLAAALSFTLEEDITGTWYVKAMVVDKDFPEDRRPRKVSPIKVTALGGG 60
QY 61 NLEATFTFMRDRCIOKKILMRKTEEPGKFSAYGGRKLIYLOELPGTDDYVFYCKDORRG 120
Db 61 KLEATFTFMRDRCIOKKILMRKTEEPGKFSAYGGRKLIYLOELPRDRHYIFYCKDQHHG 120
QY 121 GLRYMGKLVG 130
Db 121 GLLHMGKLVG 130
RESULT 11
AAB67742
ID AAB67742 standard; protein; 170 AA.
XX
XX AAB67742;
XX
XX 11-JUN-2001 (first entry)
XX
XX Amino acid sequence of odorant binding polypeptide OBPIIb-alpha.
XX
XX Odorant binding polypeptide; OBPII; hydrophobic ligand; odorant; allergy;
XX asthma; cancer; perfume; hyperlipidemia; obesity; food additive;
XX anticancer; foetus detoxification; pregnancy marker.
XX

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XX OS Homo sapiens.
XX WO200112806-A2.
XX 22-FEB-2001.
XX 11-AUG-2000; 2000WO-FR002319.
XX 12-AUG-1999; 99FR-00010439.
XX (UYAU-) UNIV AUVERGNE.
XX (PITI/) PITIOT G.
XX Pitiot G, Lacazette E, Gachon F;
XX WPI; 2001-202864/20.
XX N-PSDB; AAF80043.
XX New human odorant-binding proteins, useful for solubilizing lipophilic
PT compounds in the transportation of anticancer agents or for slow release
PT of perfumes.
XX Claim 24; Page 114-115; 132pp; French.
XX The present sequence represents a human odorant binding polypeptide
CC (OBP), designated OBPIB-alpha. OBPs provide long-term retention (gradual
CC release) of lipophilic compounds, so prolong the 'hold' of perfumes,
CC deodorants etc. . OBP polypeptides are used as binding proteins for
CC hydrophobic ligands (particularly odorants); as competitive inhibitors
CC (agonists or antagonists) of cellular lipocalcin receptors; to detect
CC specific antibodies for diagnosis of allergy, asthma or cancer; for
CC controlling volatilisation of an odorant, specifically in perfumes,
CC cosmetics or disinfectant compositions; to screen compounds, especially
CC odorants or flavours, e.g. human pheromones, for binding to OBP, also in
CC analysis of complex perfume mixtures; to solubilise lipophilic compounds;
CC for treating hyperlipidemia or obesity, or to supplement non-maternal
CC milk when combined with nutritional fatty acids, as food additives; as a
CC transporter of pharmaceuticals, especially anticancer agents (providing
CC delayed release) but also for delivery across the placental barrier (e.g.
CC for detoxification of the foetus); as a marker of pregnancy or foeto-
CC placental pathology (rupture of the amniotic membrane); and as
CC anti-allergic agents
XX Sequence 170 AA;
SQ
Query Match 79.7%; Score 623; DB 4; Length 170;
Best Local Similarity 91.5%; Pred. No. 1.2e-65;
Matches 119; Conservative 4; Mismatches 7; Indels 0; Gaps 0;
QY 1 MKTFLGVTLGLAALSFLEEDITGTWYVKAMVVDKFPEDRRPKVSPVKVTALGGG 60
Db 1 MKTFLGVTLGLAALSFLEEDITGTWYVKAMVVDKFPEDRRPKVSPVKVTALGGG 60
QY 61 NLEATFTFMREDRCIQKKILMKTEEPGKFSAYGGRKLIYLOELPGTDYFYCKDQRRG 120
Db 61 KLEATFTFMREDRCIQKKILMKTEEPGKISAYGGRKLIYLOELPRDRHYFYCKDQHHG 120
QY 121 GLRYMGKLVG 130
Db 121 GLLHMGKLVG 130
RESULT 12
ID ABB84919
XX ID ABB84919 standard; protein; 170 AA.
XX ABB84919;
XX 16-MAY-2002 (first entry)
XX Human PRO1283 protein sequence SEQ ID NO:206.
XX

KW Human; angiogenesis; cardiant; cytostatic; antiangiogenic; hypotensive;
KW vulnery; antiarteriosclerotic; PRO agonist; PRO antagonist; trauma;
KW gene therapy; cardiovascular disorder; endothelial disorder; cancer;
KW angiogenic disorder; cardiac hypertrophy; atherosclerosis; hypertension;
KW age-related macular degeneration; arterial restenosis; angina;
KW rheumatoid arthritis; myocardial infarction; thrombophlebitis;
KW lymphangitis; tumour angiogenesis; breast carcinoma; liver carcinoma;
XX wound healing; chromosome mapping; gene mapping.
XX Homo sapiens.
XX WO200200690-A2.
XX 03-JAN-2002.
XX 20-JUN-2001; 2001WO-US019692.
XX 23-JUN-2000; 2000US-0213637P.
XX 20-JUL-2000; 2000US-0219556P.
XX 25-JUL-2000; 2000US-0220624P.
XX 28-JUL-2000; 2000US-0220664P.
XX 02-AUG-2000; 2000WO-US020710.
XX 17-AUG-2000; 2000US-0222695P.
XX 23-AUG-2000; 2000US-00643657.
XX 24-AUG-2000; 2000WO-US023522.
XX 07-SEP-2000; 2000US-0230978P.
XX 18-SEP-2000; 2000US-00664610.
XX 18-SEP-2000; 2000US-00665350.
XX 24-OCT-2000; 2000US-0242922P.
XX 08-NOV-2000; 2000US-00709238.
XX 08-NOV-2000; 2000WO-US030952.
XX 10-NOV-2000; 2000WO-US030873.
XX 01-DEC-2000; 2000WO-US032678.
XX 20-DEC-2000; 2000US-00747259.
XX 20-DEC-2000; 2000WO-US034956.
XX 22-JAN-2001; 2001US-00767609.
XX 28-FEB-2001; 2001US-00796498.
XX 28-FEB-2001; 2001WO-US006520.
XX 01-MAR-2001; 2001WO-US006666.
XX 09-MAR-2001; 2001US-00802706.
XX 14-MAR-2001; 2001US-00808689.
XX 22-MAR-2001; 2001US-00816744.
XX 05-APR-2001; 2001US-00828366.
XX 10-MAY-2001; 2001US-00854208.
XX 10-MAY-2001; 2001US-00854280.
XX 25-MAY-2001; 2001US-00866028.
XX 25-MAY-2001; 2001US-00866034.
XX 25-MAY-2001; 2001WO-US017092.
XX 30-MAY-2001; 2001US-00870574.
XX 30-MAY-2001; 2001WO-US017443.
XX 01-JUN-2001; 2001WO-US017800.
XX (GETH) GENENTECH INC.
XX Baker KP, Ferrara N, Gerber H, Gerritsen ME, Goddard A;
XX Godowski PJ, Gurney AL, Hillan KJ, Marsters SA, Pan J, Paoni NF;
XX Stephan JF, Watanabe CK, Williams PM, Wood WI, Ye W;
XX WPI; 2002-090516/12.
XX N-PSDB; ABL88174.
XX One hundred and eighty seven nucleic acids encoding PRO polypeptides,
PT useful in diagnosis and treatment of cardiovascular (e.g. myocardial
PT infarction), endothelial or angiogenic disorders in a mammal.
XX Claim 11; Fig 206; 565pp; English.
XX ABL88072 to ABL88258 encode the PRO proteins given in ABB84817 to
CC ABB85003. The PRO proteins and polynucleotides have cardiant, cytostatic,
CC antiangiogenic, hypotensive, vulnery and antiarteriosclerotic
CC activities, and can be used in gene therapy. The PRO polynucleotides,
CC proteins, agonists and antagonists are useful for treating or diagnosing

CC a cardiovascular, endothelial or angiogenic disorder in a mammal, e.g.
 CC cardiac hypertrophy, trauma, cancer, age-related macular degeneration,
 CC atherosclerosis, hypertension, arterial restenosis, rheumatoid arthritis,
 CC angina, myocardial infarctions, thrombophlebitis, lymphangitis, tumour
 CC angiogenesis (such as breast carcinoma and liver carcinoma) and wound
 CC healing. The PRO polynucleotides have applications in molecular biology,
 CC including use as hybridisation probes, and in chromosome and gene
 CC mapping. ABL88259 to ABL88267 represent primers and probes used in the
 CC exemplification of the present invention
 XX
 XX
 SQ Sequence 170 AA;

Query Match 79.7%; Score 623; DB 5; Length 170;
 Best Local Similarity 91.5%; Pred. No. 1.2e-65;
 Matches 119; Conservative 4; Mismatches 7; Indels 0; Gaps 0;
 QY 1 MKTFLGVTLGLAALSFTLEEDITGTWYVKAMVVDKDFPDRPRKVPKVTALGGG 60
 DB 1 MKTFLGVTLGLAALSFTLEEDITGTWYVKAMVVDKDFPDRPRKVPKVTALGGG 60
 QY 61 NLEATFTFMREDRCIQKKILMRKTEEPGKFSAYGGRKLIYLOELPGTDDYFYCKDQRRG 120
 DB 61 KLEATFTFMREDRCIQKKILMRKTEEPGKFSAYGGRKLIYLOELPRDRHYIFYCKDQHHG 120
 QY 121 GLRYWKLGV 130
 DB 121 GLLHMGKLVG 130

RESULT 13
 AAE22099
 ID AAE22099 standard; protein; 170 AA.
 AC AAE22099;
 DT 25-JUL-2002 (first entry)
 DE Human Zlipo1 protein.
 KW Human; lipocalin protein; Zlipo1; glycodeilin; pheromone; anxiety;
 KW beneficial mood; hypothalamic; satiety; identification; energy balance;
 KW reproductive biology.
 XX
 OS Homo sapiens.
 XX WO20023201-A2.
 PN 21-MAR-2002.
 PD 12-SEP-2001; 2001WO-US028525.
 PF 13-SEP-2000; 2000US-0232218P.
 PR (ZYMO) ZYMOGENETICS INC.
 PA Lok S, Foster DC, Holloway JL;
 PI WPI; 2002-362374/39.
 DR N-PSDB; AAD35179.
 XX

Use of Zlipo1 or glycodeilin (human pheromone polypeptides) for
 identifying presence of Zlipo1 receptor, glycodeilin receptor, Zlipo1
 ligand or glycodeilin ligand in test sample.

Claim 1; Page 47-48; 50pp; English.
 The invention relates to a method of using two human lipocalin proteins,
 Zlipo1 and glycodeilin as pheromone polypeptides. Human pheromones are used
 to alleviate anxiety, promote beneficial moods and to alter hypothalamic
 functions, such as satiety, energy balance and reproductive biology. The
 sequences of the invention are used for identifying the presence of
 Zlipo1 receptor or a glycodeilin receptor in a test sample, or for
 identifying the presence of a Zlipo1 ligand or a glycodeilin ligand in a

CC test sample. The present sequence is human Zlipo1 protein
 XX
 SQ Sequence 170 AA;

Query Match 79.7%; Score 623; DB 5; Length 170;
 Best Local Similarity 91.5%; Pred. No. 1.2e-65;
 Matches 119; Conservative 4; Mismatches 7; Indels 0; Gaps 0;
 QY 1 MKTFLGVTLGLAALSFTLEEDITGTWYVKAMVVDKDFPDRPRKVPKVTALGGG 60
 DB 1 MKTFLGVTLGLAALSFTLEEDITGTWYVKAMVVDKDFPDRPRKVPKVTALGGG 60
 QY 61 NLEATFTFMREDRCIQKKILMRKTEEPGKFSAYGGRKLIYLOELPGTDDYFYCKDQRRG 120
 DB 61 KLEATFTFMREDRCIQKKILMRKTEEPGKFSAYGGRKLIYLOELPRDRHYIFYCKDQHHG 120
 QY 121 GLRYWKLGV 130
 DB 121 GLLHMGKLVG 130

RESULT 14
 ABB95525
 ID ABB95525 standard; protein; 170 AA.
 AC ABB95525;
 XX
 DT 19-JUL-2002 (first entry)
 DE Human angiogenesis related protein PRO1283 SEQ ID NO: 206.
 KW Human; angiogenesis; PRO protein; cardiovascularisation; wound; cancer;
 KW atherosclerosis; cardiac hypertrophy; gene therapy; endothelial disorder;
 KW cardiatic; cytostatic; antiangiogenic; hypotensive; vulnerary;
 KW antiarteriosclerotic.
 XX
 OS Homo sapiens.
 XX WO200208284-A2.
 PN 31-JAN-2002.
 PD 09-JUL-2001; 2001WO-US021735.
 PF 20-JUL-2000; 2000US-0219556P.
 PR 25-JUL-2000; 2000US-0220624P.
 PR 25-JUL-2000; 2000US-0220624P.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 02-AUG-2000; 2000US-0222695P.
 PR 17-AUG-2000; 2000US-00643657.
 PR 23-AUG-2000; 2000WO-US023522.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 07-SEP-2000; 2000US-0230978P.
 PR 18-SEP-2000; 2000US-00664610.
 PR 18-SEP-2000; 2000US-00665350.
 PR 24-OCT-2000; 2000US-0242922P.
 PR 08-NOV-2000; 2000US-00709238.
 PR 08-NOV-2000; 2000WO-US030952.
 PR 10-NOV-2000; 2000WO-US030873.
 PR 01-DEC-2000; 2000WO-US032678.
 PR 20-DEC-2000; 2000US-00747259.
 PR 20-DEC-2000; 2000WO-US034956.
 PR 22-JAN-2001; 2000US-00767609.
 PR 28-FEB-2001; 2000US-00796498.
 PR 28-FEB-2001; 2001WO-US006520.
 PR 01-MAR-2001; 2001WO-US006666.
 PR 09-MAR-2001; 2001US-00802706.
 PR 14-MAR-2001; 2001US-00808689.
 PR 22-MAR-2001; 2001US-00816744.
 PR 05-APR-2001; 2001US-00828366.
 PR 10-MAY-2001; 2001US-00854208.
 PR 10-MAY-2001; 2001US-00854280.
 PR 25-MAY-2001; 2001US-00866028.

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PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 30-MAY-2001; 2001US-00870574.
PR 30-MAY-2001; 2001WO-US017443.
PR 01-JUN-2001; 2001WO-US017800.
PR 20-JUN-2001; 2001WO-US019692.
XX (GETH ) GENENTECH INC.
PA (BAKE/) BAKER K P.
PA (FERR/) FERRARA N.
PA (GERB/) GERBER H.
PA (GERR/) GERRITSEN M E.
PA (GODD/) GODDARD A.
PA (GODO/) GODOWSKI P J.
PA (GURN/) GURNEY A L.
PA (HILL/) HILLAN K J.
PA (MARS/) MARSTERS S A.
PA (PANJ/) PAN J.
PA (PAON/) PAONI N F.
PA (STEP/) STEPHAN J F.
PA (WATA/) WATANABE C K.
PA (WILL/) WILLIAMS P M.
PA (WOOD/) WOOD W I.
XX
PI Baker KP, Ferrara N, Gerber H, Gerritsen ME, Goddard A; Paoni NF;
PI Godowski PJ, Gurney AL, Hillan KJ, Marsters SA, Pan J, Paoni NF;
PI Stephan JF, Watanabe CK, Williams PM, Wood WI, Ye W;
XX
XX WPI: 2002-171999/22.
DR N-PSDB; ABL95663.
XX
XX One hundred and eighty seven nucleic acids encoding PRO polypeptides,
PT useful in diagnosis and treatment of cardiovascular (e.g. myocardial
PT infarction), endothelial or angiogenic disorders in a mammal.
XX
PS Claim 11; Fig 206; 567pp; English.
XX
XX The present invention provides the protein and coding sequences of human
CC PRO proteins. These are useful for treating or diagnosing a
CC cardiovascular, endothelial or angiogenic disorder, including cardiac
CC hypertrophy, trauma, cancer, age-related macular degeneration,
CC atherosclerosis, hypertension, arterial restenosis, rheumatoid arthritis,
CC angina, myocardial infarctions, thrombophlebitis, lymphangitis, tumour
CC angiogenesis (such as breast carcinoma and liver carcinoma) and wound
CC healing. The present sequence is a PRO protein of the invention
XX
SQ Sequence 170 AA;
Query Match 79.7%; Score 623; DB 5; Length 170;
Best Local Similarity 91.5%; Pred. No. 1.2e-65;
Matches 119; Conservative 4; Mismatches 7; Indels 0; Gaps 0;
QY 1 MKTLFLGVTGLAALSFLEBEDITGWYKAMVVDKDFPEDRPRKVPKVTALGGG 60
Db 1 MKTLFLGVTGLAALSFLEBEDITGWYKAMVVDKDFPEDRPRKVPKVTALGGG 60
QY 61 NLEATFTFMREDRCIQKILMKRTEBPGKFSAYGGRKLIYLOELPGTDYFYCKDQRRG 120
Db 61 KLEATFTFMREDRCIQKILMKRTEBPGKFSAYGGRKLIYLOELPRDRHYFYCKDQHHG 120
QY 121 GLRYMCKLVG 130
Db 121 GLLRHMKLVG 130
RESULT 15
ABO33631
ID ABO33631 standard; protein; 170 AA.
XX
XX ABO33631;
AC
XX
DT 17-SEP-2003 (first entry)
XX
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DE Novel human secreted and transmembrane protein PRO1283.
XX
XX Human; secreted and transmembrane protein; PRO; angiogenesis;
KW endothelial cell proliferation; wound healing; immune response;
KW T-lymphocytes proliferation; neonatal heart hypertrophy; tumour;
KW cardiac insufficiency disorder; calcium flux; inflammation;
KW vascular endothelial growth factor-stimulated proliferation;
KW mammalian kidney mesangial cell proliferation; Berger disease;
KW nephropathy; Schanlein-Henoch purpura; celiac disease; Crohn's disease;
KW dermatitis herpetiformis; diabetes; haemoglobin switch; insulinemia;
KW pancreatic beta-cell precursor cell differentiation; thalassemias;
KW obesity; auditory hair cell regeneration; hearing loss; bone disorder;
XX cartilage disorder; sports injury; arthritis.
OS Homo sapiens.
XX
XX US2003073130-A1.
XX
XX 17-APR-2003.
PD
XX 11-DEC-2001; 2001US-00015869.
XX
XX 01-SEP-1998; 98US-0098716P.
XX 01-SEP-1998; 98US-0098723P.
XX 01-SEP-1998; 98US-0098749P.
XX 01-SEP-1998; 98US-0098750P.
XX 02-SEP-1998; 98US-0098803P.
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XX 09-SEP-1998; 98US-0099536P.
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XX 09-SEP-1998; 98US-0099598P.
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XX 09-SEP-1998; 98US-0099642P.
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XX 10-SEP-1998; 98US-0099808P.
XX 10-SEP-1998; 98US-0099812P.
XX 10-SEP-1998; 98US-0099815P.
XX 10-SEP-1998; 98US-0099816P.
XX 15-SEP-1998; 98US-0100385P.
XX 15-SEP-1998; 98US-0100388P.
XX 15-SEP-1998; 98US-0100390P.
XX 16-SEP-1998; 98US-0100584P.
XX 16-SEP-1998; 98US-0100627P.
XX 16-SEP-1998; 98US-0100661P.
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XX 16-SEP-1998; 98US-0100664P.
XX 17-SEP-1998; 98US-0100683P.
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XX 17-SEP-1998; 98US-0100710P.
XX 17-SEP-1998; 98US-0100711P.
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XX 17-SEP-1998; 98US-0100930P.
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XX 18-SEP-1998; 98US-0101068P.
XX 18-SEP-1998; 98US-0101071P.
XX 22-SEP-1998; 98US-0101279P.
XX 23-SEP-1998; 98US-0101471P.
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XX 23-SEP-1998; 98US-0101474P.
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XX 23-SEP-1998; 98US-0101477P.
XX 23-SEP-1998; 98US-0101479P.
XX 24-SEP-1998; 98US-0101738P.
XX 24-SEP-1998; 98US-0101741P.
XX 24-SEP-1998; 98US-0101915P.
XX 24-SEP-1998; 98US-0101916P.
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PR	29-SEP-1998;	98US-0102240P.	PR	16-APR-1999;	99US-0129674P.
PR	29-SEP-1998;	98US-0102307P.	PR	23-JUN-1999;	99US-0141037P.
PR	29-SEP-1998;	98US-0102330P.	PR	20-JUL-1999;	99US-0144758P.
PR	29-SEP-1998;	98US-0102331P.	PR	26-JUL-1999;	99US-0145698P.
PR	30-SEP-1998;	98US-0102484P.	PR	01-SEP-1999;	99WO-US020111.
PR	30-SEP-1998;	98US-0102487P.	PR	15-SEP-1999;	99WO-US021194.
PR	30-SEP-1998;	98US-0102570P.	PR	29-OCT-1999;	99US-0162506P.
PR	30-SEP-1998;	98US-0102571P.	PR	30-NOV-1999;	99WO-US028313.
PR	01-OCT-1998;	98US-0102684P.	PR	02-DEC-1999;	99WO-US028551.
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PR	02-OCT-1998;	98US-0102965P.	PR	05-JAN-2000;	2000WO-US000219.
PR	06-OCT-1998;	98US-0103258P.	PR	06-JAN-2000;	2000WO-US000376.
PR	06-OCT-1998;	98US-0103449P.	PR	11-FEB-2000;	2000WO-US003565.
PR	07-OCT-1998;	98US-0103314P.	PR	18-FEB-2000;	2000WO-US004342.
PR	07-OCT-1998;	98US-0103315P.	PR	24-FEB-2000;	2000WO-US005004.
PR	07-OCT-1998;	98US-0103328P.	PR	02-MAR-2000;	2000WO-US005841.
PR	07-OCT-1998;	98US-0103395P.	PR	15-MAR-2000;	2000WO-US006884.
PR	07-OCT-1998;	98US-0103396P.	PR	17-MAY-2000;	2000WO-US013705.
PR	07-OCT-1998;	98US-0103401P.	PR	22-MAY-2000;	2000WO-US014042.
PR	08-OCT-1998;	98US-0103633P.	PR	30-MAY-2000;	2000WO-US014941.
PR	08-OCT-1998;	98US-0103678P.	PR	02-JUN-2000;	2000WO-US015264.
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PR	08-OCT-1998;	98US-0103711P.	PR	24-AUG-2000;	2000WO-US023328.
PR	14-OCT-1998;	98US-0104257P.	PR	08-NOV-2000;	2000WO-US030952.
PR	20-OCT-1998;	98US-0104987P.	PR	10-NOV-2000;	2000WO-US030873.
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PR	21-OCT-1998;	98US-0105104P.	PR	01-MAR-2001;	2001WO-US006666.
PR	22-OCT-1998;	98US-0105169P.	PR	01-JUN-2001;	2001WO-US017800.
PR	22-OCT-1998;	98US-0105266P.	PR	20-JUN-2001;	2001WO-US019692.
PR	26-OCT-1998;	98US-0105693P.	PR	29-JUN-2001;	2001WO-US021066.
PR	26-OCT-1998;	98US-0105694P.	PR	09-JUL-2001;	2001WO-US021735.
PR	27-OCT-1998;	98US-0105807P.	PR	04-SEP-2001;	2001US-00946374.
PR	27-OCT-1998;	98US-0105881P.	XX		
PR	27-OCT-1998;	98US-0105982P.	PA	(GETH) GENENTECH INC.	
PR	27-OCT-1998;	98US-0106062P.	XX		
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PR	28-OCT-1998;	98US-0106029P.	PI	Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;	
PR	28-OCT-1998;	98US-0106030P.	PI	Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe CK;	
PR	28-OCT-1998;	98US-0106032P.	PI	Williams PW, Wood W;	
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PR	29-OCT-1998;	98US-0106384P.	DR	N-PSDB; ACD68350.	
PR	29-OCT-1998;	98US-0106500P.	XX		
PR	30-OCT-1998;	98US-0106464P.	PT	Novel isolated PRO polypeptides e.g. PRO1130, PRO1275, PRO1418, PRO1555,	
PR	03-NOV-1998;	98US-0106856P.	PT	PRO1787 that modulate glucose or free fatty acid uptake by skeletal	
PR	03-NOV-1998;	98US-0106902P.	PT	muscle cells, and are useful for treating diabetes, hyper- or hypo-	
PR	03-NOV-1998;	98US-0106905P.			
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PR	30-SEP-1998;	98US-0102484P.	PR	01-SEP-1999;	99WO-US020111.
PR	30-SEP-1998;	98US-0102487P.	PR	15-SEP-1999;	99WO-US021194.
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PR	30-SEP-1998;	98US-0102571P.	PR	30-NOV-1999;	99WO-US028313.
PR	01-OCT-1998;	98US-0102684P.	PR	02-DEC-1999;	99WO-US028551.
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PR	02-OCT-1998;	98US-0102965P.	PR	05-JAN-2000;	2000WO-US000219.
PR	06-OCT-1998;	98US-0103258P.	PR	06-JAN-2000;	2000WO-US000376.
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PR	07-OCT-1998;	98US-0103314P.	PR	18-FEB-2000;	2000WO-US004342.
PR	07-OCT-1998;	98US-0103315P.	PR	24-FEB-2000;	2000WO-US005004.
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PR	08-OCT-1998;	98US-0103711P.	PR	24-AUG-2000;	2000WO-US023328.
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PR	20-OCT-1998;	98US-0104987P.	PR	10-NOV-2000;	2000WO-US030873.
PR	20-OCT-1998;	98US-0105000P.	PR	01-DEC-2000;	2000WO-US032678.
PR	20-OCT-1998;	98US-0105002P.	PR	28-FEB-2001;	2001WO-US006520.
PR	21-OCT-1998;	98US-0105104P.	PR	01-MAR-2001;	2001WO-US006666.
PR	22-OCT-1998;	98US-0105169P.	PR	01-JUN-2001;	2001WO-US017800.
PR	22-OCT-1998;	98US-0105266P.	PR	20-JUN-2001;	2001WO-US019692.
PR	26-OCT-1998;	98US-0105693P.	PR	29-JUN-2001;	2001WO-US021066.
PR	26-OCT-1998;	98US-0105694P.	PR	09-JUL-2001;	2001WO-US021735.
PR	27-OCT-1998;	98US-0105807P.	PR	04-SEP-2001;	2001US-00946374.
PR	27-OCT-1998;	98US-0105881P.	XX		
PR	27-OCT-1998;	98US-0105982P.	XX		
PR	27-OCT-1998;	98US-0106062P.	PI	Baker KP, Botstein D, Desnovers L, Eaton DL, Ferrara N, Fong S;	
PR	28-OCT-1998;	98US-0106023P.	PI	Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;	
PR	28-OCT-1998;	98US-0106029P.	PI	Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe CK;	
PR	28-OCT-1998;	98US-0106030P.	PI	Williams PW, Wood W;	
PR	28-OCT-1998;	98US-0106032P.	XX		
PR	28-OCT-1998;	98US-0106033P.	XX		
PR	28-OCT-1998;	98US-0106178P.	DR	WPI; 2003-585293/55.	
PR	28-OCT-1998;	98US-0106248P.	DR	N-PSDB; ACD68350.	
PR	29-OCT-1998;	98US-0106384P.	XX		
PR	29-OCT-1998;	98US-0106500P.	PT	Novel isolated PRO polypeptides e.g. PRO1130, PRO1275, PRO1418, PRO1555,	
PR	30-OCT-1998;	98US-0106464P.	PT	PRO1787 that modulate glucose or free fatty acid uptake by skeletal	
PR	03-NOV-1998;	98US-0106856P.	PT	muscle cells, and are useful for treating diabetes, hyper- or hypo-	
PR	03-NOV-1998;	98US-0106902P.			
PR	03-NOV-1998;	98US-0106905P.			
PR	03-NOV-1998;	98US-0106932P.			
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PR	02-OCT-1998;	98US-0102965P.	PR	05-JAN-2000;	2000WO-US000219.
PR	06-OCT-1998;	98US-0103258P.	PR	06-JAN-2000;	2000WO-US000376.
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4	623	79.7	170	14	US-09-946-374-162
5	623	79.7	170	14	Sequence 162, App
6	623	79.7	170	14	US-10-006-856A-162
7	623	79.7	170	14	Sequence 162, App
8	623	79.7	170	14	US-10-006-818A-162
9	623	79.7	170	14	Sequence 162, App
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21	623	79.7	170	14	Sequence 162, App
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17	623	79.7	170	14	US-10-013-430A-162	Sequence 162, App
18	623	79.7	170	14	US-10-011-671A-162	Sequence 162, App
19	623	79.7	170	14	US-10-012-755A-162	Sequence 162, App
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22	623	79.7	170	14	US-10-223-084-206	Sequence 206, App
23	623	79.7	170	14	US-10-223-088-206	Sequence 206, App
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32	623	79.7	170	14	US-10-015-391A-162	Sequence 162, App
33	623	79.7	170	14	US-10-223-089-206	Sequence 206, App
34	623	79.7	170	14	US-10-017-407A-162	Sequence 162, App
35	623	79.7	170	14	US-10-011-833A-162	Sequence 162, App
36	623	79.7	170	14	US-10-006-041A-162	Sequence 162, App
37	623	79.7	170	14	US-10-015-822A-162	Sequence 162, App
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41	623	79.7	170	14	US-10-015-392A-162	Sequence 162, App
42	623	79.7	170	14	US-10-017-306A-162	Sequence 162, App
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ALIGNMENTS

RESULT 1
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; Sequence 22, Application US/09099823
; Patent No. US2002001990A1
; GENERAL INFORMATION:
; APPLICANT: BILLING-MEDEL, PATRICIA
; APPLICANT: COHEN MAURICE
; APPLICANT: COLPITTS, TRACEY L.
; APPLICANT: FRIEDMAN, PAULA N.
; APPLICANT: GORDON, JULIAN
; APPLICANT: GRANADOS, EDWARD N.
; APPLICANT: HODGES, STEVEN C.
; APPLICANT: KLASS, MICHAEL R.
; APPLICANT: KRATOCHVIL, JON D.
; APPLICANT: RUSSELL, JOHN C.
; APPLICANT: SCHEFFEL, CHRISTI
; APPLICANT: STROUPE, STEPHEN D.
; APPLICANT: YU, HONG
; TITLE OF INVENTION: REAGENTS AND METHODS USEFUL
; FOR DETECTING DISEASES OF THE BREAST
; NUMBER OF SEQUENCES: 27
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Abbott Laboratories
; STREET: 100 Abbott Park Road
; CITY: Abbott Park
; STATE: IL
; COUNTRY: USA
; ZIP: 60064-3500
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/099,823

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; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/879,354
; FILING DATE: 20-JUN-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Becker, Cheryl L.
; REGISTRATION NUMBER: 35,441
; REFERENCE/DOCKET NUMBER: 6120.US.PI
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 847/935-1729
; TELEFAX: 847/938-2623
; TELEX:
; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 170 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: No. US20020018990A1e
; US-09-099-823-22

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Best Local Similarity 91.5%; Pred. No. 1.6e-62;
Matches 119; Conservative 4; Mismatches 7; Indels 0; Gaps 0;

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; Patent No. US20020098497A1
; GENERAL INFORMATION:
; APPLICANT: Lok, Si
; APPLICANT: Foster, Donald C.
; APPLICANT: Holloway, James L.
; TITLE OF INVENTION: Use of Human Pheromone Polypeptides
; FILE REFERENCE: 00-85
; CURRENT APPLICATION NUMBER: US/09/951,845
; CURRENT FILING DATE: 2001-09-12
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 170
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-951-845-2

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Matches 119; Conservative 4; Mismatches 7; Indels 0; Gaps 0;

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; CURRENT FILING DATE: 2001-12-06
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 162
; LENGTH: 170
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-006-818A-162

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Matches 119; Conservative 4; Mismatches 7; Indels 0; Gaps 0;

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; Publication No. US20030064062A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan l.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830P1C9
; CURRENT APPLICATION NUMBER: US/10/006,485A
; CURRENT FILING DATE: 2001-12-06
; Prior Application Number: 60/098716
; Prior Filing Date: 1998-09-01
; Prior Application Number: 60/098723
; Prior Filing Date: 1998-09-01
; Prior Application Number: 60/098749
; Prior Filing Date: 1998-09-01
; Prior Application Number: 60/098750
; Prior Filing Date: 1998-09-01
; Prior Application Number: 60/098803
; Prior Filing Date: 1998-09-02
; Prior Application Number: 60/098821
; Prior Filing Date: 1998-09-02
; Prior Application Number: 60/098843
; Prior Filing Date: 1998-09-02
; Prior Application Number: 60/099536
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; Prior Filing Date: 1998-09-09

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; Publication No. US20030044841A1
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; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan l.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
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; CURRENT APPLICATION NUMBER: US/10/006,856A
; CURRENT FILING DATE: 2002-05-10
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; Publication No. US20030054406A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan l.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
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;	PRIOR APPLICATION NUMBER: 60/101743	
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;	PRIOR APPLICATION NUMBER: 60/103679	
;	PRIOR FILING DATE: 1998-10-08	
;	PRIOR APPLICATION NUMBER: 60/103711	
;	PRIOR FILING DATE: 1998-10-08	
;	PRIOR APPLICATION NUMBER: 60/104257	
;	PRIOR FILING DATE: 1998-10-14	
;	PRIOR APPLICATION NUMBER: 60/104987	
;	PRIOR FILING DATE: 1998-10-20	
;	PRIOR APPLICATION NUMBER: 60/105000	
;	PRIOR FILING DATE: 1998-10-20	
;	PRIOR APPLICATION NUMBER: 60/105002	
;	PRIOR FILING DATE: 1998-10-20	
;	PRIOR APPLICATION NUMBER: 60/105104	
;	PRIOR FILING DATE: 1998-10-21	
;	PRIOR APPLICATION NUMBER: 60/105169	
;	PRIOR FILING DATE: 1998-10-22	
;	PRIOR APPLICATION NUMBER: 60/105266	
;	PRIOR FILING DATE: 1998-10-22	

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; PRIOR APPLICATION NUMBER: 60/105693
; PRIOR FILING DATE: 1998-10-26
; PRIOR APPLICATION NUMBER: 60/105694
; PRIOR FILING DATE: 1998-10-26
; PRIOR APPLICATION NUMBER: 60/105807
; PRIOR FILING DATE: 1998-10-27
; PRIOR APPLICATION NUMBER: 60/105881
; PRIOR FILING DATE: 1998-10-27
; PRIOR APPLICATION NUMBER: 60/105882
; PRIOR FILING DATE: 1998-10-27
; PRIOR APPLICATION NUMBER: 60/106023
; PRIOR FILING DATE: 1998-10-28

Query Match          79.7%; Score 623; DB 14; Length 170;
Best Local Similarity 91.5%; Pred. No. 1.6e-62;
Matches 119; Conservative 4; Mismatches 7; Indels 0; Gaps 0;

Qy 1 MKTLFLGVTGLAAALSTFLBEEDITGTWYVKAMVVVDKDFEDRRPRKVS PVKVTALGGG 60
Db 1 MKTLFLGVTGLAAALSTFLBEEDITGTWYVKAMVVVDKDFEDRRPRKVS PVKVTALGGG 60
.
Qy 61 NLEATFTFMREDRCIQKKILMRKTEEPGKFSAYGGRKLIYLQELPGTDDYVYFCKDQRRG 120
Db 61 KLEATFTFMREDRCIQKKILMRKTEEPGKFSAYGGRKLIYLQELPRDRDHYIFYCKDQHHG 120

Qy 121 GLRYMGKLVG 130
Db 121 GLLHMGKLVG 130

RESULT 7
US-10-013-907A-162
; Sequence 162, Application US/10013907A
; Publication No. US20030064925A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan I.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2830PIC34
; CURRENT APPLICATION NUMBER: US/10/013,907A
; CURRENT FILING DATE: 2001-12-10
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 162
; LENGTH: 170
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-013-907A-162

Query Match          79.7%; Score 623; DB 14; Length 170;
Best Local Similarity 91.5%; Pred. No. 1.6e-62;
Matches 119; Conservative 4; Mismatches 7; Indels 0; Gaps 0;

Qy 1 MKTLFLGVTGLAAALSTFLBEEDITGTWYVKAMVVVDKDFEDRRPRKVS PVKVTALGGG 60
Db 1 MKTLFLGVTGLAAALSTFLBEEDITGTWYVKAMVVVDKDFEDRRPRKVS PVKVTALGGG 60
.
Qy 61 NLEATFTFMREDRCIQKKILMRKTEEPGKFSAYGGRKLIYLQELPGTDDYVYFCKDQRRG 120
Db 61 KLEATFTFMREDRCIQKKILMRKTEEPGKFSAYGGRKLIYLQELPRDRDHYIFYCKDQHHG 120

Qy 121 GLRYMGKLVG 130
Db 121 GLLHMGKLVG 130

RESULT 8
US-10-015-499A-162
; Sequence 162, Application US/10015499A
; Publication No. US20030065142A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan I.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2830PIC42
; CURRENT APPLICATION NUMBER: US/10/015,499A
; CURRENT FILING DATE: 2001-12-11
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 162
; LENGTH: 170
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-015-499A-162

Query Match          79.7%; Score 623; DB 14; Length 170;
Best Local Similarity 91.5%; Pred. No. 1.6e-62;
Matches 119; Conservative 4; Mismatches 7; Indels 0; Gaps 0;

Qy 1 MKTLFLGVTGLAAALSTFLBEEDITGTWYVKAMVVVDKDFEDRRPRKVS PVKVTALGGG 60
Db 1 MKTLFLGVTGLAAALSTFLBEEDITGTWYVKAMVVVDKDFEDRRPRKVS PVKVTALGGG 60
.
Qy 61 NLEATFTFMREDRCIQKKILMRKTEEPGKFSAYGGRKLIYLQELPGTDDYVYFCKDQRRG 120
Db 61 KLEATFTFMREDRCIQKKILMRKTEEPGKFSAYGGRKLIYLQELPRDRDHYIFYCKDQHHG 120

Qy 121 GLRYMGKLVG 130
Db 121 GLLHMGKLVG 130

RESULT 9
US-10-015-393A-162
; Sequence 162, Application US/10015393A
; Publication No. US20030069179A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan I.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
```

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; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830PIC46
; CURRENT APPLICATION NUMBER: US/10/015,393A
; CURRENT FILING DATE: 2002-06-10
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 162
; LENGTH: 170
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-015-393A-162

Query Match          79.7%; Score 623; DB 14; Length 170;
Best Local Similarity 91.5%; Pred. No. 1.6e-62;
Matches 119; Conservative 4; Mismatches 7; Indels 0; Gaps 0;

QY 1 MKTFLGVTGLAAALSFTLEEDITGTWYVAMVVDKDPEDRRPRKSPVKVTALGGG 60
   |||:|||||
Db 1 MKTFLGVTGLAAALSFTLEEDITGTWYVAMVVDKDPEDRRPRKSPVKVTALGGG 60
   |||:|||||

QY 61 NLEATFTFMREDRCIQKKILMRKTEEPGKYSAYGGRKLYLQELPGTDDYVFYCKDQRRG 120
   |||:|||||
Db 61 KLEATFTFMREDRCIQKKILMRKTEEPGKYSAYGGRKLYLQELPRRDHYIFYCKDQHHG 120
   |||:|||||

QY 121 GLRYMGKLVG 130
   ||:|||||
Db 121 GLLHMGKLVG 130
   ||:|||||

RESULT 10
US-10-015-869A-162
; Sequence 162, Application US/10015869A
; Publication No. US20030073130A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan I.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830PIC45
; CURRENT APPLICATION NUMBER: US/10/015,869A
; CURRENT FILING DATE: 2002-06-25
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 162
; LENGTH: 170
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-015-869A-162

Query Match          79.7%; Score 623; DB 14; Length 170;
Best Local Similarity 91.5%; Pred. No. 1.6e-62;
Matches 119; Conservative 4; Mismatches 7; Indels 0; Gaps 0;

QY 1 MKTFLGVTGLAAALSFTLEEDITGTWYVAMVVDKDPEDRRPRKSPVKVTALGGG 60
   |||:|||||
Db 1 MKTFLGVTGLAAALSFTLEEDITGTWYVAMVVDKDPEDRRPRKSPVKVTALGGG 60
   |||:|||||

QY 61 NLEATFTFMREDRCIQKKILMRKTEEPGKYSAYGGRKLYLQELPGTDDYVFYCKDQRRG 120
   |||:|||||
Db 61 KLEATFTFMREDRCIQKKILMRKTEEPGKYSAYGGRKLYLQELPRRDHYIFYCKDQHHG 120
   |||:|||||

QY 121 GLRYMGKLVG 130
   ||:|||||
Db 121 GLLHMGKLVG 130
   ||:|||||

RESULT 12
US-10-015-869A-162
; Sequence 162, Application US/10015869A
; Publication No. US20030073130A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan I.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830PIC45
; CURRENT APPLICATION NUMBER: US/10/015,869A
; CURRENT FILING DATE: 2002-06-25
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 162
; LENGTH: 170
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-015-869A-162

Query Match          79.7%; Score 623; DB 14; Length 170;
Best Local Similarity 91.5%; Pred. No. 1.6e-62;
Matches 119; Conservative 4; Mismatches 7; Indels 0; Gaps 0;

QY 1 MKTFLGVTGLAAALSFTLEEDITGTWYVAMVVDKDPEDRRPRKSPVKVTALGGG 60
   |||:|||||
Db 1 MKTFLGVTGLAAALSFTLEEDITGTWYVAMVVDKDPEDRRPRKSPVKVTALGGG 60
   |||:|||||

QY 61 NLEATFTFMREDRCIQKKILMRKTEEPGKYSAYGGRKLYLQELPGTDDYVFYCKDQRRG 120
   |||:|||||
Db 61 KLEATFTFMREDRCIQKKILMRKTEEPGKYSAYGGRKLYLQELPRRDHYIFYCKDQHHG 120
   |||:|||||

QY 121 GLRYMGKLVG 130
   ||:|||||
Db 121 GLLHMGKLVG 130
   ||:|||||
```

```
Db 61 KLEATFTFMREDRCIQKKILMRKTEEPGKYSAYGGRKLYLQELPRRDHYIFYCKDQHHG 120
   |||:|||||
QY 121 GLRYMGKLVG 130
   ||:|||||
Db 121 GLLHMGKLVG 130
   ||:|||||

RESULT 11
US-10-012-121A-162
; Sequence 162, Application US/10012121A
; Publication No. US20030073810A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan I.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830PIC20
; CURRENT APPLICATION NUMBER: US/10/012,121A
; CURRENT FILING DATE: 2001-12-07
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 162
; LENGTH: 170
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-012-121A-162

Query Match          79.7%; Score 623; DB 14; Length 170;
Best Local Similarity 91.5%; Pred. No. 1.6e-62;
Matches 119; Conservative 4; Mismatches 7; Indels 0; Gaps 0;

QY 1 MKTFLGVTGLAAALSFTLEEDITGTWYVAMVVDKDPEDRRPRKSPVKVTALGGG 60
   |||:|||||
Db 1 MKTFLGVTGLAAALSFTLEEDITGTWYVAMVVDKDPEDRRPRKSPVKVTALGGG 60
   |||:|||||

QY 61 NLEATFTFMREDRCIQKKILMRKTEEPGKYSAYGGRKLYLQELPGTDDYVFYCKDQRRG 120
   |||:|||||
Db 61 KLEATFTFMREDRCIQKKILMRKTEEPGKYSAYGGRKLYLQELPRRDHYIFYCKDQHHG 120
   |||:|||||

QY 121 GLRYMGKLVG 130
   ||:|||||
Db 121 GLLHMGKLVG 130
   ||:|||||

RESULT 12
US-10-006-116A-162
; Sequence 162, Application US/10006116A
; Publication No. US20030082626A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan I.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
```

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; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830PIC15
; CURRENT APPLICATION NUMBER: US/10/006,116A
; CURRENT FILING DATE: 2001-12-16
; PRIOR APPLICATION NUMBER: 60/098716
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098723
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098749
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098750
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098803
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/098821
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/098843
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/099536
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; PRIOR APPLICATION NUMBER: 60/099741
; PRIOR FILING DATE: 1998-09-10
; PRIOR APPLICATION NUMBER: 60/099754
; PRIOR FILING DATE: 1998-09-10
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; PRIOR FILING DATE: 1998-09-10
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; PRIOR FILING DATE: 1998-09-10
; PRIOR APPLICATION NUMBER: 60/099808
; PRIOR FILING DATE: 1998-09-10
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; PRIOR FILING DATE: 1998-09-10
; PRIOR APPLICATION NUMBER: 60/099815
; PRIOR FILING DATE: 1998-09-10
; PRIOR APPLICATION NUMBER: 60/099816
; PRIOR FILING DATE: 1998-09-10
; PRIOR APPLICATION NUMBER: 60/100385
; PRIOR FILING DATE: 1998-09-15
; PRIOR APPLICATION NUMBER: 60/100388
; PRIOR FILING DATE: 1998-09-15
; PRIOR APPLICATION NUMBER: 60/100390
; PRIOR FILING DATE: 1998-09-15
; PRIOR APPLICATION NUMBER: 60/100584
; PRIOR FILING DATE: 1998-09-16
; PRIOR APPLICATION NUMBER: 60/100627
; PRIOR FILING DATE: 1998-09-16
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; PRIOR FILING DATE: 1998-09-16
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; PRIOR FILING DATE: 1998-09-16
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; PRIOR FILING DATE: 1998-09-16
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; PRIOR FILING DATE: 1998-09-17
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; PRIOR FILING DATE: 1998-09-18
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; PRIOR APPLICATION NUMBER: 60/101475
; PRIOR FILING DATE: 1998-09-23
; PRIOR APPLICATION NUMBER: 60/101476
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; PRIOR APPLICATION NUMBER: 60/101477
; PRIOR FILING DATE: 1998-09-23
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; PRIOR FILING DATE: 1998-09-24
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; PRIOR FILING DATE: 1998-09-24
; PRIOR APPLICATION NUMBER: 60/101915
; PRIOR FILING DATE: 1998-09-24
; PRIOR APPLICATION NUMBER: 60/101916
; PRIOR FILING DATE: 1998-09-24
; PRIOR APPLICATION NUMBER: 60/102207
; PRIOR FILING DATE: 1998-09-29
; PRIOR APPLICATION NUMBER: 60/102240
; PRIOR FILING DATE: 1998-09-29
; PRIOR APPLICATION NUMBER: 60/102307
; PRIOR FILING DATE: 1998-09-29
; PRIOR APPLICATION NUMBER: 60/102330
; PRIOR FILING DATE: 1998-09-29
; PRIOR APPLICATION NUMBER: 60/102331
; PRIOR FILING DATE: 1998-09-29
; PRIOR APPLICATION NUMBER: 60/102484
; PRIOR FILING DATE: 1998-09-30
; PRIOR APPLICATION NUMBER: 60/102487
; PRIOR FILING DATE: 1998-09-30
; PRIOR APPLICATION NUMBER: 60/102570
; PRIOR FILING DATE: 1998-09-30
; PRIOR APPLICATION NUMBER: 60/102571
; PRIOR FILING DATE: 1998-09-30
; PRIOR APPLICATION NUMBER: 60/102684
; PRIOR FILING DATE: 1998-10-01
; PRIOR APPLICATION NUMBER: 60/102687
; PRIOR FILING DATE: 1998-10-01
; PRIOR APPLICATION NUMBER: 60/102965
; PRIOR FILING DATE: 1998-10-02
; PRIOR APPLICATION NUMBER: 60/103258
; PRIOR FILING DATE: 1998-10-06
; PRIOR APPLICATION NUMBER: 60/103314
; PRIOR FILING DATE: 1998-10-07
; PRIOR APPLICATION NUMBER: 60/103315
; PRIOR FILING DATE: 1998-10-07
; PRIOR APPLICATION NUMBER: 60/103328
; PRIOR FILING DATE: 1998-10-07
; PRIOR APPLICATION NUMBER: 60/103395
; PRIOR FILING DATE: 1998-10-07
; PRIOR APPLICATION NUMBER: 60/103396

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; PRIOR FILING DATE: 1998-10-07
; PRIOR APPLICATION NUMBER: 60/103401
; PRIOR FILING DATE: 1998-10-07
; PRIOR APPLICATION NUMBER: 60/103449
; PRIOR FILING DATE: 1998-10-06
; PRIOR APPLICATION NUMBER: 60/103633
; PRIOR FILING DATE: 1998-10-08
; PRIOR APPLICATION NUMBER: 60/103678
; PRIOR FILING DATE: 1998-10-08
; PRIOR APPLICATION NUMBER: 60/103679
; PRIOR FILING DATE: 1998-10-08
; PRIOR APPLICATION NUMBER: 60/103711
; PRIOR FILING DATE: 1998-10-08
; PRIOR APPLICATION NUMBER: 60/104257
; PRIOR FILING DATE: 1998-10-14
; PRIOR APPLICATION NUMBER: 60/104987
; PRIOR FILING DATE: 1998-10-20
; PRIOR APPLICATION NUMBER: 60/105000
; PRIOR FILING DATE: 1998-10-20
; PRIOR APPLICATION NUMBER: 60/105002
; PRIOR FILING DATE: 1998-10-20
; PRIOR APPLICATION NUMBER: 60/105104
; PRIOR FILING DATE: 1998-10-21
; PRIOR APPLICATION NUMBER: 60/105169
; PRIOR FILING DATE: 1998-10-22
; PRIOR APPLICATION NUMBER: 60/105266
; PRIOR FILING DATE: 1998-10-22
; PRIOR APPLICATION NUMBER: 60/105693
; PRIOR FILING DATE: 1998-10-26
; PRIOR APPLICATION NUMBER: 60/105694
; PRIOR FILING DATE: 1998-10-26
; PRIOR APPLICATION NUMBER: 60/105807
; PRIOR FILING DATE: 1998-10-27
; PRIOR APPLICATION NUMBER: 60/105881
; PRIOR FILING DATE: 1998-10-27
; PRIOR APPLICATION NUMBER: 60/105882
; PRIOR FILING DATE: 1998-10-27
; PRIOR APPLICATION NUMBER: 60/106023
; PRIOR FILING DATE: 1998-10-28

Query Match 79.7%; Score 623; DB 14; Length 170;
Best Local Similarity 91.5%; Pred. No. 1.6e-62;
Matches 119; Conservative 4; Mismatches 7; Indels 0; Gaps 0;

QY 1 MKTLFLGVTGLAAALSFTLEEDITGTWYVKAMVVDKDFPEDRRPRKVPVKVTALGGG 60
DB 1 MKTLFLGVTGLAAALSFTLEEDITGTWYVKAMVVDKDFPEDRRPRKVPVKVTALGGG 60

QY 61 NLEATFTFMRDRCIOKKILMRKTEBPGKFSAYGGRKLIYLOELPGTDDYVFYCKDQRRG 120
DB 61 KLEATFTFMRDRCIOKKILMRKTEBPGKFSAYGGRKLIYLOELPRRDHYIFYCKDQHHG 120

QY 121 GLRYMGKLVG 130
DB 121 GLLHMGKLVG 130

RESULT 13
US-10-006-117A-162
; Sequence 162, Application US/10006117A
; Publication No. US20030082627A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan I.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.

; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830P1C13
; CURRENT APPLICATION NUMBER: US/10/006,117A
; CURRENT FILING DATE: 2002-03-19
; Prior Application removed - See File Wrapper or Palm
; PRIOR FILING DATE: 2001-07-09
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 162
; LENGTH: 170
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-006-117A-162

Query Match 79.7%; Score 623; DB 14; Length 170;
Best Local Similarity 91.5%; Pred. No. 1.6e-62;
Matches 119; Conservative 4; Mismatches 7; Indels 0; Gaps 0;

QY 1 MKTLFLGVTGLAAALSFTLEEDITGTWYVKAMVVDKDFPEDRRPRKVPVKVTALGGG 60
DB 1 MKTLFLGVTGLAAALSFTLEEDITGTWYVKAMVVDKDFPEDRRPRKVPVKVTALGGG 60

QY 61 NLEATFTFMRDRCIOKKILMRKTEBPGKFSAYGGRKLIYLOELPGTDDYVFYCKDQRRG 120
DB 61 KLEATFTFMRDRCIOKKILMRKTEBPGKFSAYGGRKLIYLOELPRRDHYIFYCKDQHHG 120

QY 121 GLRYMGKLVG 130
DB 121 GLLHMGKLVG 130

RESULT 14
US-10-017-527A-162
; Sequence 162, Application US/10017527A
; Publication No. US20030082628A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan I.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830P1C63
; CURRENT APPLICATION NUMBER: US/10/017,527A
; CURRENT FILING DATE: 2001-12-13
; PRIOR APPLICATION NUMBER: 60/098716
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098723
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098749
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098750
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098803
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/098821
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/098843
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/099536

1	PRIOR APPLICATION NUMBER: 60/101476
2	PRIOR FILING DATE: 1998-09-23
3	PRIOR APPLICATION NUMBER: 60/101477
4	PRIOR FILING DATE: 1998-09-23
5	PRIOR APPLICATION NUMBER: 60/101479
6	PRIOR FILING DATE: 1998-09-23
7	PRIOR APPLICATION NUMBER: 60/101738
8	PRIOR FILING DATE: 1998-09-24
9	PRIOR APPLICATION NUMBER: 60/101741
10	PRIOR FILING DATE: 1998-09-24
11	PRIOR APPLICATION NUMBER: 60/101743
12	PRIOR FILING DATE: 1998-09-24
13	PRIOR APPLICATION NUMBER: 60/101915
14	PRIOR FILING DATE: 1998-09-24
15	PRIOR APPLICATION NUMBER: 60/101916
16	PRIOR FILING DATE: 1998-09-24
17	PRIOR APPLICATION NUMBER: 60/102207
18	PRIOR FILING DATE: 1998-09-29
19	PRIOR APPLICATION NUMBER: 60/102240
20	PRIOR FILING DATE: 1998-09-29
21	PRIOR APPLICATION NUMBER: 60/102307
22	PRIOR FILING DATE: 1998-09-29
23	PRIOR APPLICATION NUMBER: 60/102330
24	PRIOR FILING DATE: 1998-09-29
25	PRIOR APPLICATION NUMBER: 60/102331
26	PRIOR FILING DATE: 1998-09-29
27	PRIOR APPLICATION NUMBER: 60/102484
28	PRIOR FILING DATE: 1998-09-30
29	PRIOR APPLICATION NUMBER: 60/102487
30	PRIOR FILING DATE: 1998-09-30
31	PRIOR APPLICATION NUMBER: 60/102570
32	PRIOR FILING DATE: 1998-09-30
33	PRIOR APPLICATION NUMBER: 60/102571
34	PRIOR FILING DATE: 1998-09-30
35	PRIOR APPLICATION NUMBER: 60/102684
36	PRIOR FILING DATE: 1998-10-01
37	PRIOR APPLICATION NUMBER: 60/102687
38	PRIOR FILING DATE: 1998-10-01
39	PRIOR APPLICATION NUMBER: 60/102965
40	PRIOR FILING DATE: 1998-10-02
41	PRIOR APPLICATION NUMBER: 60/103258
42	PRIOR FILING DATE: 1998-10-06
43	PRIOR APPLICATION NUMBER: 60/103314
44	PRIOR FILING DATE: 1998-10-07
45	PRIOR APPLICATION NUMBER: 60/103315
46	PRIOR FILING DATE: 1998-10-07
47	PRIOR APPLICATION NUMBER: 60/103328
48	PRIOR FILING DATE: 1998-10-07
49	PRIOR APPLICATION NUMBER: 60/103395
50	PRIOR FILING DATE: 1998-10-07
51	PRIOR APPLICATION NUMBER: 60/103396
52	PRIOR FILING DATE: 1998-10-07
53	PRIOR APPLICATION NUMBER: 60/103401
54	PRIOR FILING DATE: 1998-10-07
55	PRIOR APPLICATION NUMBER: 60/103449
56	PRIOR FILING DATE: 1998-10-08
57	PRIOR APPLICATION NUMBER: 60/103711
58	PRIOR FILING DATE: 1998-10-08
59	PRIOR APPLICATION NUMBER: 60/104257
60	PRIOR FILING DATE: 1998-10-14
61	PRIOR APPLICATION NUMBER: 60/104987
62	PRIOR FILING DATE: 1998-10-20
63	PRIOR APPLICATION NUMBER: 60/105000
64	PRIOR FILING DATE: 1998-10-20
65	PRIOR APPLICATION NUMBER: 60/105002
66	PRIOR FILING DATE: 1998-10-20
67	PRIOR APPLICATION NUMBER: 60/105104

1 MKTLFLGVTGLAAALSFTLEEDITGTWYVKAMVVDKDFPEDRRPRKVPVKVTALGGG 60
61 NLEATFTFMREDRCIOKKILMRKTEEPGKFSAYGGRKLIYLQELPGTDDYFYCKDQRRG 120
61 KLEATFTFMREDRCIOKKILMRKTEEPGKFSAYGGRKLIYLQELPRDRHYIFYCKDQHHG 120
121 GLRYMGKLVG 130
121 GLLHMGKLVG 130

Search completed: June 7, 2005, 14:43:39
Job time : 149 secs

PRIOR FILING DATE: 1998-10-21
PRIOR APPLICATION NUMBER: 60/105169
PRIOR FILING DATE: 1998-10-22
PRIOR APPLICATION NUMBER: 60/105266
PRIOR FILING DATE: 1998-10-22
PRIOR APPLICATION NUMBER: 60/105693
PRIOR FILING DATE: 1998-10-26
PRIOR APPLICATION NUMBER: 60/105694
PRIOR FILING DATE: 1998-10-26
PRIOR APPLICATION NUMBER: 60/105807
PRIOR FILING DATE: 1998-10-27
PRIOR APPLICATION NUMBER: 60/105881
PRIOR FILING DATE: 1998-10-27
PRIOR APPLICATION NUMBER: 60/105882
PRIOR FILING DATE: 1998-10-27
PRIOR APPLICATION NUMBER: 60/106023
PRIOR FILING DATE: 1998-10-28

Query Match 79.7%; Score 623; DB 14; Length 170;
Best Local Similarity 91.5%; Pred. No. 1.6e-62;
Matches 119; Conservative 4; Mismatches 7; Indels 0; Gaps 0;

QY 1 MKTLFLGVTGLAAALSFTLEEDITGTWYVKAMVVDKDFPEDRRPRKVPVKVTALGGG 60
DB 1 MKTLFLGVTGLAAALSFTLEEDITGTWYVKAMVVDKDFPEDRRPRKVPVKVTALGGG 60
QY 61 NLEATFTFMREDRCIOKKILMRKTEEPGKFSAYGGRKLIYLQELPGTDDYFYCKDQRRG 120
DB 61 KLEATFTFMREDRCIOKKILMRKTEEPGKFSAYGGRKLIYLQELPRDRHYIFYCKDQHHG 120
QY 121 GLRYMGKLVG 130
DB 121 GLLHMGKLVG 130

RESULT 15
US-10-013-913A-162
Sequence 162, Application US/10013913A
Publication No. US20030083462A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Baton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Gurney, Austin L.
APPLICANT: Hillan, Kenneth J.
APPLICANT: Pan, James
APPLICANT: Paoni, Nicholas F.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2830P1C40
CURRENT APPLICATION NUMBER: US/10/013,913A
CURRENT FILING DATE: 2002-07-15
Prior Application removed - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 477
SEQ ID NO 162
LENGTH: 170
TYPE: PRT
ORGANISM: Homo sapiens
US-10-013-913A-162

Query Match 79.7%; Score 623; DB 14; Length 170;
Best Local Similarity 91.5%; Pred. No. 1.6e-62;
Matches 119; Conservative 4; Mismatches 7; Indels 0; Gaps 0;

QY 1 MKTLFLGVTGLAAALSFTLEEDITGTWYVKAMVVDKDFPEDRRPRKVPVKVTALGGG 60

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: June 7, 2005, 14:30:34 ; Search time 39 Seconds
(without alignments)
360.196 Million cell updates/sec

Title: US-10-049-372-4
Perfect score: 782
Sequence: 1 MKTLEFLGVTLGLAALSFTL.....KLVGPCRCPHVGSPGHLTCR 146

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues
Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR 79:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	ID	Description
1	284.5	36.4	176	2 A40464	odorant-binding pr
2	274.5	35.1	176	1 LCHUL	lacrimal lipocalin
3	239	30.6	177	2 S43647	von Ebner's gland
4	238.5	30.5	176	2 JC6503	tear lipocalin von
5	232	29.7	177	2 S08161	hydrophobic molecu
6	205	26.2	185	2 S51803	vomeromonal secret
7	186.5	23.8	176	2 A33672	late lactation pro
8	171	21.9	182	2 S51802	vomeromonal secret
9	138	17.6	85	2 A28561	late lactation pro
10	122	15.6	183	2 S25465	lipocalin - giant
11	120.5	15.4	184	2 S52354	gene cpl-1 protein
12	118	15.1	162	2 S33876	beta-lactoglobulin
13	108.5	13.9	155	2 A29699	beta-lactoglobulin
14	107	13.7	180	1 LGGT	beta-lactoglobulin
15	106.5	13.6	161	2 S33877	beta-lactoglobulin
16	105	13.4	163	2 S11538	beta-lactoglobulin
17	102	13.0	161	2 S33878	beta-lactoglobulin
18	101	12.9	180	1 LGSH	beta-lactoglobulin
19	99	12.7	178	1 LGBO	beta-lactoglobulin
20	99	12.7	178	2 A45542	beta-lactoglobulin
21	96.5	12.3	163	2 S14719	beta-lactoglobulin
22	96.5	12.3	166	1 LGH02	beta-lactoglobulin
23	96	12.0	180	1 A39467	placental protein
24	93.5	12.0	161	2 S33875	beta-lactoglobulin
25	89.5	11.4	177	1 OVFGP	olfactory protein
26	89	11.4	162	1 LGBUI	beta-lactoglobulin
27	89	11.4	162	2 S00132	beta-lactoglobulin
28	89	11.4	188	1 SQRTAD	androgen-dependent
29	88	11.3	178	2 A30230	quiescence-specifi

30	85	10.9	172	2 A28713	odorant-binding pr
31	84	10.7	162	1 LGHOD	beta-lactoglobulin
32	82	10.5	162	1 LGHO	beta-lactoglobulin
33	79.5	10.2	233	2 T35594	hypothetical prote
34	79	10.1	379	2 T45286	butyryl-CoA dehydr
35	76	9.7	777	2 C41830	DNA primase - phag
36	75	9.6	292	1 JQ0400	phosphoribulokinas
37	74.5	9.5	537	2 B86274	F7A19.16 protein -
38	73	9.3	189	2 S57748	prostaglandin D sy
39	73	9.3	611	2 T37820	hypothetical prote
40	72.5	9.3	252	1 A38159	3,4-dihydroxy-2-bu
41	72.5	9.3	339	2 AD3501	Mg(2+) chelataase f
42	72	9.2	604	2 T15091	hypothetical prote
43	71.5	9.1	217	2 A85965	3,4 dihydroxy-2-bu
44	71.5	9.1	217	2 A98120	3,4 dihydroxy-2-bu
45	71.5	9.1	337	2 S74044	hypothetical prote

ALIGNMENTS

RESULT 1

A40464
odorant-binding protein homolog OBP-II precursor - rat
C:Species: Rattus norvegicus (Norway rat)
C>Date: 28-May-1992 #sequence_revision 28-May-1992 #text_change 09-Jul-2004
C:Accession: A40464
R:Dear, T.N.; Campbell, K.; Rabbitts, T.H.
Biochemistry 30, 10376-10382, 1991
A:Title: Molecular cloning of putative odorant-binding and odorant-metabolizing protein
A:Reference number: A40464; MUID:92031476; PMID:1931961
A:Accession: A40464
A>Status: Preliminary
A:Molecule type: mRNA
A:Residues: 1-176 <DEA>
A:Cross-references: UNIPROT:Q63613; GB:M76733
C:Superfamily: lipocalin; lipocalin homology
F:25-171/Domain: lipocalin homology <Lip>

Query Match 36.4%; Score 284.5; DB 2; Length 176;
Best Local Similarity 44.4%; Pred. No. 28-21;
Matches 60; Conservative 21; Mismatches 49; Indels 5; Gaps 2;

QY	1	MKTLEFLGV-TLGLAALSFTL----	EEEDITGTWYVKAMVVDKDFEDRRPRKVS	PVKVT	55
Db	1	MKSRLTLLGLGMAVLKAEAPPDDQEDFS	QKWTATVCDNHTDGRKPMKVFW	PMTVT	60
QY	56	ALGGGNLEATFTFMREDRCIQKILMRKTE	EFKFSAYGGRKLIYLQELPGTDDY	VFYCK	115
Db	61	ALEGGDLEVRITFRGKGCHLRITMHTDE	PGKYTFKGGKTYTKEIPVKDHYI	FYIK	120
QY	116	DQRRGGLRYMGKLVG	130		
Db	121	GQRHGKSYLKGKLVG	135		

RESULT 2

LCHUL
lacrimal lipocalin precursor - human
N:Alternate names: lipocalin 1; PMFA; tear prealbumin; von Ebner's gland protein
C:Species: Homo sapiens (man)
C>Date: 10-Jun-1993 #sequence_revision 02-Jun-1995 #text_change 09-Jul-2004
C:Accession: A44029; A49186; S29842; I53728; S18929; S34277
R:Redl, B.; Holtschneider, P.; Lottspeich, F.
J. Biol. Chem. 267, 20282-20287, 1992
A:Title: cDNA cloning and sequencing reveals human tear prealbumin to be a member of the
A:Reference number: A44029; MUID:93015903; PMID:1400345
A:Accession: A44029
A:Molecule type: mRNA; protein
A:Residues: 1-176 <RED>
A:Cross-references: UNIPROT:P31025; GB:M90424; NID:G642380; PIDN:AAA61845.1; PID:918445
A:Experimental source: lacrimal gland, tears
A>Note: sequence extracted from NCBI backbone (NCBIN:115716, NCBIP:115717)

A>Note: part of this sequence, including the amino end of the mature protein, were detected
A>Note: 22-leu and 24-Ser were also observed as amino-terminal residues
R;Lassagne, H.; Gachon, A.M.
Exp. Eye Res. 56, 605-609, 1993
A>Title: Cloning of a human lacrimal lipocalin secreted in tears.
A;Reference number: A49186; MUID:93272888; PMID:8500570
A;Accession: A49186
A;Molecule type: mRNA; protein
A;Residues: 1-176 <LAS>
A;Cross-references: EMBL:X67647; NID:g313855; PIDN:CAA47889.1; PID:g313856
A;Experimental source: lacrimal gland
A;Note: sequence extracted from NCBI backbone (NCBIN:133186, NCBI:P:133187)
R;Bleeker, M.; Kock, K.; Ahlers, C.; Buck, F.; Schmale, H.
Biochim. Biophys. Acta 1172, 131-137, 1993
A>Title: Molecular cloning of human von Ebner's gland protein, a member of the lipocalin
A;Reference number: S29842; MUID:93176795; PMID:7679926
A;Accession: S29842
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-176 <BL2>
A;Cross-references: EMBL:X62418; NID:g37660; PIDN:CAA44284.1; PID:g37661
R;Holzfeind, P.; Redl, B.
Gene 139, 177-183, 1994
A>Title: Structural organization of the gene encoding the human lipocalin tear prealbumin
A;Reference number: I53728; MUID:94156196; PMID:8112601
A;Accession: I53728
A;Status: translated from GB/EMBL/DBJ
A;Molecule type: DNA
A;Residues: 1-176 <RE2>
A;Cross-references: GB:L14927; NID:g307517; PIDN:AAAI8633.1; PID:g307518
C;Genetics:
A;Gene: GDB:LCN1; TP
A;Cross-references: GDB:I38345; OMIM:151675
A;Map position: 9q34-9q34
A;Introns: 30/3; 74/2; 98/1; 135/1; 169/1
C;Superfamily: lipocalin; lipocalin homology
C;Keywords: extracellular protein; von Ebner's gland
F;1-18/Domain: signal sequence #status predicted <SIG>
F;21-176/Product: lacrimal lipocalin #status predicted <MAT>
F;26-171/Domain: lipocalin homology <LIP>
F;79-171/Disulfide bonds: #status predicted

Query Match 35.1%; Score 274.5; DB 1; Length 176;
Best Local Similarity 42.3%; Pred. No. 26-20; Indels 11; Gaps 4;
Matches 58; Conservative 27; Mismatches 41;

Qy 1 MKTFLGVTLGLAALS-----FTLEEE--DITGTWYVKAMVVDKDFPDRPRKVPVKV 54
Db 1 MKPLLVSLGLIAALQAHLASDEEIQDVSGTWYKAMTVDRFPE-MNLESVTPWTL 59

Qy 55 TALGGNLEATFTFMREDRCIQKILMRKTEEPGKFSAYGGRKLIYLQELPGTDDYFYC 114
Db 60 TTLEGGNLEAKVTMLISGRQEVKAVLEKTDPEGKYTDGGKHVAYIIRSHVKDIIFYC 119

Qy 115 KDQREG---GLRYMGK 127
Db 120 EGGLEHGKPRVGRVKLVGR 136

RESULT 3
S43647
von Ebner's gland protein VEGP2 - rat
C;Species: Rattus norvegicus (Norway rat)
C;Date: 20-Oct-1994 #sequence_revision 19-Oct-1995 #text_change 09-Jul-2004
A;Accession: S43647
R;Kock, K.; Ahlers, C.; Schmale, H.
Eur. J. Biochem. 221, 905-916, 1994
A>Title: Structural organization of the genes for rat von Ebner's gland proteins 1 and 2
A;Reference number: S43647; MUID:94237155; PMID:7514123
A;Accession: S43647
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-177 <KOC>

A;Cross-references: UNIPROT:P41244; GB:X74806; NID:g505302; PIDN:CAA52810.1; PID:g505303
C;Superfamily: lipocalin; lipocalin homology
F;25-172/Domain: lipocalin homology <LIP>

Query Match 30.6%; Score 239; DB 2; Length 177;
Best Local Similarity 37.1%; Pred. No. 8.1e-17;
Matches 53; Conservative 28; Mismatches 54; Indels 8; Gaps 3;

Qy 1 MKTFLGVTLGLAALS-----FTLEEDITGTWYVKAMVVDKDFPDR-RPRKVPVKV 54
Db 1 MKALLLTFSLIAALQAQAFPTTEENQDVSGTWYKAAAWDKIIPDKKFGSVSTPMKI 60

Qy 55 TALGGNLEATFTFMREDRCIQKILMRKTEEPKFSAYGGRKLIYLQELPGTDDYFYC 114
Db 61 KTEGGNLOVQFTVLLISGRQEMSTVLEKTDPEGKYTAISGKVQVYIPSAVEDHYIFY 120

Qy 115 KDQRRGGLRYMGKLVGPCRCPHV 137
Db 121 EGKIHRRHFQIAKLVG--RNPEI 141

RESULT 4
JC6503
tear lipocalin von Ebner's gland protein - pig
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 05-Feb-1999 #sequence_revision 05-Feb-1999 #text_change 09-Jul-2004
A;Accession: JC6503
R;Holzfeind, P.; Merschak, P.; Wojnar, P.; Redl, B.
Gene 202, 61-67, 1997
A>Title: Structure and organization of the porcine LCN1 gene encoding Tear lipocalin/von
A;Reference number: JC6503; MUID:98087418; PMID:9427546
A;Accession: JC6503
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-176 <HOL>
A;Cross-references: UNIPROT:P53715; GB:U96150
C;Superfamily: lipocalin; lipocalin homology
F;27-171/Domain: lipocalin homology <LIP>

Query Match 30.5%; Score 238.5; DB 2; Length 176;
Best Local Similarity 36.2%; Pred. No. 9.1e-17;
Matches 50; Conservative 30; Mismatches 47; Indels 11; Gaps 3;

Qy 1 MKTFLGVTLGLAALSFTLEE-----EDITGTWYVKAMVVDKDFPDRPRKVPVKV 52
Db 2 MRALLAIGLGLVAALQ--AOEFPAVGQPLQDLGRWYKAMTSDPEIP-GKKPESVTPL 58

Qy 53 KVTALGGNLEATFTFMREDRCIQKILMRKTEEPGKFSAYGGRKLIYLQELPGTDDYVF 112
Db 59 ILKALEGGDLEAQITFLIDGQCQDVLVLKKTNPFTTAYDGKRVVILPSPKVKDHVIL 118

Qy 113 YCKDQRRGGLRYMGKLVG 130
Db 119 YCEGELDGQEVMAKLVG 136

RESULT 5
S08161
hydrophobic molecule transport protein VEG precursor - rat
N;Alternate names: von Ebner's gland proteins VEGP1
C;Species: Rattus norvegicus (Norway rat)
C;Date: 30-Sep-1991 #sequence_revision 30-Sep-1991 #text_change 09-Jul-2004
A;Accession: S08161; S43648
R;Schmale, H.; Holtgreve-Grez, H.; Christiansen, H.
Nature 343, 366-369, 1990
A>Title: Possible role for salivary gland protein in taste reception indicated by homolog
A;Reference number: S08161; MUID:90136923; PMID:1689010
A;Accession: S08161
A;Status: not compared with conceptual translation
A;Molecule type: mRNA
A;Residues: 1-177 <SCH>
A;Cross-references: UNIPROT:P20289; GB:X52016; NID:g57473; PIDN:CAA36263.1; R;Kock, K.; Ahlers, C.; Schmale, H.

Query Match	23.8%	Score 186.5	DB 2	Length 176
Best Local Similarity	31.9%	Pred. No. 1.7e-11		
Matches 44	Conservative	31	Mismatches 54	Indels 9
Gaps				
Qy	1	MKTFLFLGVTIAGLAAL--SFTLEE-EDITGTWYVKAMVVDKPPERRPRKVPKVKTA	56	
Db	1	MRVFLTLISLSPIIHADDFAPSEKFPSEGTYYVQVIVANDKPEDEIPDISPLTITY	60	
Qy	57	LGGNLEATPTFMREDRCIOKKILMRKTEBPKFSAYGGRKLIYVLQELPGTDD---	YVYF	113
Db	61	LNNKGMEAKFTVKDNCCNEINLTLEIDEPKITT--TRHLHHICDVTRTSEKYWILS	118	
Qy	114	CKQRRGGLRYMGKIVGP	131	
Db	119	CVREFOGTOIREAELVGP	136	

RESULT 8

Query Match	21.9%;	Score 171;	DB 2;	Length 182;
Best Local Similarity	27.9%;	Pred. NO. 6.7e-10;		
Match 38. Conservative	31. Mismatches	57. Indels	10. Gaps	2

QY	1	MKTFLGVTGLAAALS-----FTLEBEDTGTWYVKAMVVVDKDFPEDRRPRKPKSPVKV	54
DB	1	MRALLLIIISFCNLAVLQADSSFLANNNGSGKWFALKAUSEDDIPIN-----KVSPLMI	56
QY	55	TALGGGNLEATFTPMRDRCTQKKILMRKTBEPKFSAYGGRKLILYQLBELPGTDDYVVC	114
DB	57	LVLANGDIELSIITHYIDOCLEVTILEKTDVFGQYLAFEGKTHIQVQLSSVKGHYMLYC	116
QY	115	KDQRGGGLRYMGKLVG	130
DB	117	DGEIEGMRFLMTOLIG	132

A28561

A28561
late lactation protein A - tamar wallaby (fragments)
C:Species: Macropus eugenii (tamar wallaby)
C:Date: 19-Nov-1988 #sequence_revision 19-Nov-1988 #text_change 09-Jul-2004
C:Accession: A28561
R:Nicholas, K.R.; Messer, M.; Elliott, C.; Maher, F.; Shaw, D.C.

Biochem. J. 241, 899-904, 1987
A:Title: A novel whey protein synthesized only in late lactation by the mammary gland of
A:Reference number: A28561; MUID:87241271; PMID:3109381
A:Accession: A28561
A:Molecule type: protein
A:Residues: 1-85 <NIC>
A:Cross-references: UNIPROT:P20462
C:Superfamily: lipocalin; lipocalin homology

Query Match 17.6%; Score 138; DB 2; Length 85;
Best Local Similarity 40.4%; Pred. No. 6.7e-07;
Matches 23; Conservative 15; Mismatches 19; Indels 0; Gaps 0;

QY 27 GTWYKAMVVDKDPEDRRPRKVPKVTALGGNLEATFTFMREDRCIOKKILMRK 83
DB 13 GTYVQVIAVDKEPDEPEIDISLPTISLYNNGKMEAKFTYKDNCCNEINLTLEK 69

RESULT 10
S25465
lipocalin - giant toad
C:Species: Bufo marinus (giant toad)
C:Date: 20-Feb-1995 #sequence revision 20-Feb-1995 #text_change 09-Jul-2004
A:Accession: A44456; 150117; S25465
R:Achen, M.G.; Harms, P.J.; Thomas, T.; Richardson, S.J.; Wattenhall, R.E.; Schreiber, C.
J. Biol. Chem. 267, 23170-23174, 1992
A:Title: Protein synthesis at the blood-brain barrier. The major protein secreted by amp
A:Reference number: A44456; MUID:93054646; PMID:1385415
A:Accession: A44456
A:Status: preliminary
A:Molecule type: mRNA; protein
A:Residues: 1-183 <AC2>
A:Cross-references: UNIPROT:Q01584; GB:L06806; NID:G211032; PIDN:AAA48554.1; PID:G211033
A:Experimental source: choroid plexus
A:Note: sequence extracted from NCBI backbone (NCBIP:118239)
C:Superfamily: lipocalin; lipocalin homology
F:28-179/Domain: lipocalin homology <LIP>

Query Match 15.6%; Score 122; DB 2; Length 183;
Best Local Similarity 29.3%; Pred. No. 6.3e-05;
Matches 36; Conservative 20; Mismatches 53; Indels 14; Gaps 4;

QY 1 MKTFLGVTGLAALSF-----TLSEEDITGTWYKAMVVDK-PPEDRRPRKVSP 51
DB 1 MGLVLSPALVALSALCVGVDPIDQFQEDKILGWYIGIGLASNSNWFQSKKQKRWCT 60

QY 52 VKVTALGGNLEATFTFMREDRCIOKKILMRKTEBPGKFSFSA----YGGKLIYLOELPGT 107
DB 61 TWITPTADGNLDVATFPKLDRCCKSMYTIKTEQGRFLSKSPRYGSDHVRVVE-SNY 119

QY 108 DDY 110
DB 120 DEY 122

RESULT 11
S23354
gene cpl-1 protein - African clawed frog
C:Species: Xenopus laevis (African clawed frog)
C:Date: 08-May-1995 #sequence revision 21-Jul-1995 #text_change 09-Jul-2004
A:Accession: S52354
R:Engel, E.; Lepperding, G.; Richter, K.
submitted to the EMBL Data Library, February 1995
A:Description: An mRNA expressed in the anterior-most part of the neural plate encodes a
A:Reference number: S52354
A:Accession: S52354
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-184 <ENG>
A:Cross-references: UNIPROT:Q91721; EMBL:X84414; NID:G666120; PIDN:CAA59132.1; PID:G6661
C:Superfamily: lipocalin; lipocalin homology
F:29-180/Domain: lipocalin homology <LIP>

Query Match 15.4%; Score 120.5; DB 2; Length 184;
Best Local Similarity 26.1%; Pred. No. 9e-05;
Matches 35; Conservative 26; Mismatches 58; Indels 15; Gaps 4;

QY 1 MKTFLGVTGLAALSF-----LEBEDITGTWYKAMVVDKDPEDRRPR-KVS 50
DB 1 MMRILLALSIGVACSLWVGAEVQVPDFQEKVLGWYIGIGLASNSNWFKDKRSHMOWC 60

QY 51 PVKVTALGGNLEATFTFMREDRCIOKKILMRKTEBPGKFSFSA----YGGKLIYLOELPG 106
DB 61 TTIITPTADGNLEATFTFMREDRCIOKKILMRKTEBPGKFSFSA----YGGKLIYLOELPG 119

QY 107 TDDYVYCKDQRRG 120
DB 120 YDEVILMYTVTKTG 133

RESULT 12
S33876
beta-lactoglobulin III - cat
C:Species: Felis silvestris catus (domestic cat)
C:Date: 22-Nov-1993 #sequence revision 03-Nov-1995 #text_change 09-Jul-2004
A:Accession: S33876; E60525
R:Halliday, J.A.; Bell, K.; McAndrew, K.; Shaw, D.C.
Protein Seq. Data Anal. 5, 201-205, 1993
A:Title: Feline beta-lactoglobulins I, II and III, and canine beta-lactoglobulins I and
cat and dog.
A:Reference number: S33875
A:Accession: S33876
A:Status: preliminary
A:Molecule type: protein
A:Residues: 1-162 <HAL>
A:Note: 162-Val was also found
R:Halliday, J.A.; Bell, K.; McKenzie, H.A.; Shaw, D.C.
Comp. Biochem. Physiol. B 95, 773-779, 1990
A:Title: Feline whey proteins: identification, isolation and initial characterization of
A:Reference number: A60525; MUID:90263403; PMID:2344734
A:Accession: E60525
A:Status: preliminary
A:Molecule type: protein
A:Residues: 1-24 <HA2>
C:Superfamily: lipocalin; lipocalin homology
C:Keywords: mammary gland; milk
F:10-160/Domain: lipocalin homology <LIP>
F:66-160,106-119/Disulfide bonds: #status predicted

Query Match 15.1%; Score 118; DB 2; Length 162;
Best Local Similarity 30.8%; Pred. No. 0.00014;
Matches 33; Conservative 20; Mismatches 32; Indels 22; Gaps 5;

QY 20 LEEDITGTWYKAM-----VVDKFPEDRRPRKVPKVTALGGNLEATFTFMREDR 73
DB 10 LDLOKVAGTWHSMAMAAASDISLDSY-----APLRYVYQELRPTPRDNLEILRKWEQKR 65

QY 74 CIOKKILMRKTEBPGKFSAYGGRKLIYLOE-----LPQTD--DYVYFC 114
DB 66 CVQKKILAQKTELPAPF-----KISYLDENELIVLDTDYENLYLFC 106

RESULT 13
A29699
beta-lactoglobulin - eastern gray kangaroo
C:Species: Macropus giganteus (eastern gray kangaroo)
C:Date: 31-Dec-1988 #sequence revision 31-Dec-1988 #text_change 09-Jul-2004
A:Accession: A29699
R:Godovac-Zimmermann, J.; Shaw, D.
Biol. Chem. Hoppe-Seyler 368, 879-886, 1987
A:Title: The primary structure, binding site and possible function of beta-lactoglobulin
A:Reference number: A29699; MUID:87299024; PMID:3620116
A:Accession: A29699
A:Molecule type: protein
A:Residues: 1-155 <GOD>

A:Cross-references: UNIPROT:PI1944
C:Superfamily: lipocalin; lipocalin homology
F:10-155/Domain: lipocalin homology <LIP>

Query Match 13.9%; Score 108.5; DB 2; Length 155;
Best Local Similarity 28.7%; Pred. No. 0.0012;
Matches 27; Conservative 18; Mismatches 44; Indels 5; Gaps 3;
QY 23 EDITGTVYKAMVVDKPPEDRRPRKVSVKVTALGGNLEATFTFMREDRCIOKKILMR 82
DB 13 ERFVGSWYLRRAAKTMEFSIPLDMDIKEVNLTP--EGNLELV-LKTDRCVCKKLLK 69
QY 83 KTEEPKFSAYGGRKLIYLQELPGT--DDYVFYC 114
DB 70 KYKPTFEFIYISSESYTFVCWETDYSYFLFC 103

RESULT 14

LGST

beta-lactoglobulin precursor - goat
C:Species: Capra aegagrus hircus (domestic goat)
C:Date: 17-May-1985 #sequence revision 12-Apr-1996 #text_change 09-Jul-2004
C:Accession: A03220; S14507; S42800; S42801
R:Preaux, G.; Braunitzer, G.; Schrank, B.; Stangl, A.
Hoppe-Seyler's Z. Physiol. Chem. 360, 1595-1604, 1979
A:Title: The amino acid sequence of goat beta-lactoglobulin.
A:Reference number: A91682; MUID:80070611; PMID:511095
A:Accession: A03220

A:Molecule type: protein
A:Residues: 19-180 <PRE>
A:Cross-references: UNIPROT:P02756
R:Folch, J.M.; Coll, A.; Sanchez, A.
submitted to the EMBL Data Library, March 1991
A:Reference number: S14507
A:Accession: S14507
A:Molecule type: mRNA
A:Residues: 1-180 <LIP>
A:Cross-references: EMBL:X58471; NID:g967; PIDN:CAA1385.1; PID:g968
R:Kim, J.
submitted to the EMBL Data Library, January 1993
A:Reference number: S42800
A:Accession: S42800
A:Molecule type: mRNA
A:Residues: 1-180 <KIM>
A:Cross-references: EMBL:Z19569; NID:g437751; PIDN:CAA79623.1; PID:g437752
A:Accession: S42801
A:Molecule type: mRNA
A:Residues: 1-32 <KI2>

A:Cross-references: EMBL:Z19570; NID:g437753; PIDN:CAA79624.1; PID:g437754
C:Comment: Under physiological conditions beta-lactoglobulin exists as an equilibrium mixture of two forms: the native form and the lactogen form.
C:Superfamily: lipocalin; lipocalin homology
C:Keywords: milk
F:1-18/Domain: signal sequence #status predicted <SIG>
F:19-180/Product: beta-lactoglobulin #status predicted <MAT>
F:28-178/Domain: lipocalin homology <LIP>
F:84-178,124-137/Disulfide bonds: #status predicted

Query Match 13.7%; Score 107; DB 1; Length 180;
Best Local Similarity 28.5%; Pred. No. 0.0021;
Matches 37; Conservative 16; Mismatches 59; Indels 18; Gaps 5;
QY 1 MKTILFGLVTLGLAALSFT-----LEEDITGTVYKAMVVDKPPEDRR--PRKVS 50
DB 1 MKCLLLALGLALACGIIQAIIVTQTMKGLDIQKVAGTWYSLAASDISLDAQSAPLVY 60
QY 51 PVKVTALGGNLEATFTFMREDRCIOKKILMRTEEPG--KFSAYGGRKLIYLQELPGTD 108
DB 61 VEELKPTPEGNLEILLQKQWENGECQAQKKTAEKTKIPAVFKIDALNENKVLVD----TD 116

QY 109 --DYVFYCKD 116
DB 117 YKKYLLFCME 126

RESULT 15

S33877

beta-lactoglobulin I - dog
C:Species: Canis lupus familiaris (dog)
C:Date: 02-Dec-1993 #sequence_revision 01-Sep-1995 #text_change 09-Jul-2004
C:Accession: S33877; A61590
R:Halliday, J.A.; Bell, K.; McAndrew, K.; Shaw, D.C.
Protein Seq. Data Anal. 5, 201-205, 1993
A:Title: Feline beta-lactoglobulins I, II and III, and canine beta-lactoglobulins I and II and dog.

A:Reference number: S33875
A:Accession: S33877
A>Status: preliminary
A:Molecule type: protein
A:Residues: 1-161 <HAL>
A:Cross-references: UNIPROT:P33685
R:Pervais, S.; Brew, K.

Arch. Biochem. Biophys. 246, 846-854, 1986
A:Title: Purification and characterization of the major whey proteins from the milks of le (Canis familiaris).
A:Reference number: A61590; MUID:86214061; PMID:3707136

A:Accession: A61590
A>Status: preliminary
A:Molecule type: protein

A:Residues: 'L', 2-20, 'A', 22-26 <PER>
C:Superfamily: lipocalin; lipocalin homology
C:Keywords: mammary gland; milk
F:10-159/Domain: lipocalin homology <LIP>
F:66-159,106-119/Disulfide bonds: #status predicted

Query Match 13.6%; Score 106.5; DB 2; Length 161;
Best Local Similarity 28.7%; Pred. No. 0.0021;
Matches 31; Conservative 20; Mismatches 40; Indels 17; Gaps 5;

QY 19 TLEEDD---ITGTWYKAMVVD--KDFPEDRRPRKVSVKVTALGGNLEATFTFMREDR 73
DB 6 TWEDLDLQKVAGTWHSMAASDISLDSSETAPLVYIQELRPTPDQNLKLVLRKWDGR 65
QY 74 CIQKILMRKTEEPKFSAYGGRKLIYLOE----LPGT--DDYVFYCK 115
DB 66 CAEQKVLAEKTEVPAEF-----KINYVEENQIFLLDITDYNLYFCE 107

Search completed: June 7, 2005, 14:40:16
Job time : 40 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: June 7, 2005, 14:29:40 ; Search time 177 Seconds
(without alignments)
422.393 Million cell updates/sec

Title: US-10-049-372-4
Perfect score: 782
Sequence: 1 MKTLEPLGVTGLAALSFLL.....KLVGPCRPVHGSPGHLTCR 146

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1612378 seqs, 512079187 residues 1612378

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Uniprot 03: *
1: uniprot_sprot: *
2: uniprot_trembl: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	679	86.8	170	OBPA_HUMAN	Q9ny56 homo sapien
2	623	79.7	170	OBPA_HUMAN	Q9ny56 homo sapien
3	284.5	36.4	176	Q63613	Q63613 rattus norv
4	274.5	35.1	176	VEGP_HUMAN	P31025 homo sapien
5	244	31.2	174	ALL1_CANFA	O18873 canis famil
6	239	30.6	177	VEG2_RAT	P41244 rattus norv
7	238.5	30.5	176	VEGP_PIG	P53715 sus scrofa
8	238.5	30.5	176	Q86658	Q86658 sus scrofa
9	236	30.2	176	Q8KI9	Q8KI9 mus musculu
10	232	29.7	177	VEG1_RAT	P20289 rattus norv
11	218.5	27.9	174	LLPB_MACEU	Q8SQ30 macropus eu
12	205	26.2	185	VNS2_MOUSE	Q62472 mus musculu
13	199.5	25.5	176	LLP_TRIVU	Q29144 trichosurus
14	188.5	24.1	176	Q71RT0	Q71RT0 macropus eu
15	186.5	23.8	176	LLPA_MACEU	P20462 macropus eu
16	171	21.9	182	VNS1_MOUSE	Q62471 mus musculu
17	163	20.8	159	Q9JLK6	Q9JLK6 rattus norv
18	128.5	16.4	184	Q6DKB2	Q6DKB2 xenopus lae
19	123	15.7	140	Q6JVF0	Q6JVF0 mus musculu
20	122	15.6	183	LIPO_BUFMA	Q01584 bufo marinu
21	121.5	15.5	184	Q92136	Q92136 xenopus lae
22	121	15.5	174	LACB_MACEU	Q29614 macropus eu
23	120.5	15.4	184	Q91721	Q91721 xenopus lae
24	119.5	15.3	178	MUPL_MOUSE	Q9D267 mus musculu
25	118	15.1	162	LACC_FELCA	P33688 felis silve
26	117	15.0	183	Q8AW88	Q8AW88 hyla japoni
27	116	14.8	191	PGHD_SHEEP	Q9XEM0 ovis aries
28	115.5	14.8	178	Q80ZC4	Q80ZC4 mus musculu
29	108.5	13.9	155	LACB_MACGI	P11944 macropus gi
30	108	13.8	174	LACB_TRIVU	Q29146 trichosurus
31	107.5	13.7	191	PGHD_BOVIN	Q02853 bos taurus

32	107	13.7	180	1	LACB_CAPHI	P02756 capra hircu
33	106.5	13.6	161	1	LACA_CANFA	P33685 canis famil
34	105	13.4	163	1	LACA_EQUAS	P19647 equus asinu
35	105	13.4	181	1	LACA_HORSE	P07380 equus cabal
36	104.5	13.4	189	1	PGHD_PIG	Q29095 sus scrofa
37	103	13.2	161	1	LACC_CANFA	P33686 canis famil
38	103	13.2	180	1	LACB_BUBBU	P02755 bubalus bub
39	102	13.0	185	2	Q8QFM7	Q8QFM7 gallus gall
40	102	13.0	191	1	PGHD_CANFA	Q9X865 canis famil
41	102	13.0	191	1	PGHD_FELCA	Q29487 felis silve
42	101	12.9	180	1	LACB_HORSE	P02758 equus cabal
43	101	12.9	180	1	LACB_SHEEP	P67976 ovis aries
44	100	12.8	186	2	O77511	O77511 papio cynoc
45	99	12.7	178	1	LACB_BOVIN	P02754 bos taurus

ALIGNMENTS

```

RESULT 1
OBPA_HUMAN
ID OBPA_HUMAN STANDARD; PRT; 170 AA.
AC Q9NY56; Q9NY50; Q9NY53; Q9NY54; Q9NY55;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Odorant-binding protein 2a precursor (OBPIIa).
GN Name=OBP2A;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A. (ISOFORMS AA; AB; AD AND AG).
RX MEDLINE=20076326; PubMed=10607840; DOI=10.1093/hmg/9.2.289;
RA Lacazette E., Gachon A.-M., Pitiot G.;
RT "A novel human odorant-binding protein gene family resulting from
RT genomic duplicons at 9q34: differential expression in the oral and
RT genital spheres.";
RL Hum. Mol. Genet. 9:289-301(2000).
CC -!- FUNCTION: Probably binds and transports small hydrophobic volatile
CC molecules.
CC -!- SUBCELLULAR LOCATION: Secreted (Probable).
CC -!- ALTERNATIVE PRODUCTS:
CC Event=Alternative splicing; Named isoforms=4;
CC Name=AA;
CC ISOID=Q9NY56-1; Sequence=Displayed;
CC Name=AB;
CC ISOID=Q9NY56-2; Sequence=VSP_003136;
CC Name=AD;
CC ISOID=Q9NY56-3; Sequence=VSP_003135;
CC Name=AG;
CC ISOID=Q9NY56-4; Sequence=VSP_003137;
CC -!- TISSUE SPECIFICITY: Strongly expressed in the nasal structures,
CC salivary and lachrymal glands, and lung.
CC -!- SIMILARITY: Belongs to the lipocalin family.
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
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CC -----
CC EMBL; AJ251021; CAB71318.1; -
CC EMBL; AJ251022; CAB71319.1; -
CC EMBL; AJ251023; CAB71320.1; -
CC EMBL; AJ251024; CAB71321.1; -
CC EMBL; AJ251029; CAB71326.1; -
CC Genew; HGNC:23380; OBP2A.
CC MIM; 164320; -
CC GO; GO:0005549; F.odorant binding; NAS.

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```
Db 1 MKTFLGVTLGLAALSFLEEDITGTWYVKAMVVDKDFEDRRPRKVPKVTALGGG 60
Qy 61 NLEATFTFMREDRCIQKILMRKTEEPKFSAYGGRKLIYIQLPGTDDYVYCKDQRRG 120
Db 61 KLEATFTFMREDRCIQKILMRKTEEPKFSAYGGRKLIYIQLPGRDHYFYCKDQHHG 120
Qy 121 GLRYMGKLVG 130
Db 121 GLLHMGKLVG 130

RESULT 3
Q63613
ID Q63613 PRELIMINARY; PRT; 176 AA.
AC Q63613;
DT 01-NOV-1996 (TReMBLrel. 01, Created)
DT 01-NOV-1996 (TReMBLrel. 01, Last sequence update)
DT 01-JUN-2003 (TReMBLrel. 24, Last annotation update)
DE Odorant-binding protein.
GN Name=RY2G12;
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=Fisher; TISSUE=Olfactory mucosa;
RX MEDLINE=92031476; PubMed=1931961;
RA Dear T.N., Campbell K.D., Rabbitts T.H.;
RT "Molecular cloning of putative odorant-binding and odorant-
*RT metabolizing proteins.";
RL Biochemistry 30:10376-10382 (1991).
DR EMBL; M76734; AAA42307.1; -.
DR PIR; A40464; A40464.
DR GO; GO:0005215; F:transporter activity; IEA.
DR GO; GO:0006810; P:transport; IEA.
DR InterPro; IPR011038; Calycin.
DR InterPro; IPR000566; Lipoclin_cytFABP.
DR InterPro; IPR002450; vonEbner_gland.
DR Pfam; PF00061; Lipocalin; 1.
DR PRINTS; PR01175; VNEBERGLAND.
SQ SEQUENCE 176 AA; 20171 MW; 3328D11B90FD91BF CRC64;

Query Match 36.4%; Score 284.5; DB 2; Length 176;
Best Local Similarity 44.4%; Pred. No. 3.1e-22;
Matches 60; Conservative 21; Mismatches 49; Indels 5; Gaps 2;

Qy 1 MKTFLGV-TLGLAALSFLEEDITGTWYVKAMVVDKDFEDRRPRKVPKVT 55
Db 1 MKSRLTLVLLGLMAVLKQAEPDQEDFSGRWYTKATVCDRNHTDGRKPKVPMVT 60
Qy 56 ALGGGNLEATFTFMREDRCIQKILMRKTEEPKFSAYGGRKLIYIQLPGTDDYVYCK 115
Db 61 ALEGGDLEVRITFRGKCHLRITMHTDEFGKTYTFKGGTYFKTPVKDHYFYIK 120
Qy 116 DQRRGGLRYMGKLVG 130
Db 121 GQRHGKSYLKGKLVG 135

RESULT 4
VEGP_HUMAN
ID VEGP_HUMAN STANDARD; PRT; 176 AA.
AC P31025;
DT 01-JUL-1993 (Rel. 26, Created)
DT 01-JUL-1993 (Rel. 26, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Von Ebner's gland protein precursor (VEG protein) (Tear prealbumin)
DE (TP) (Tear lipocalin) (Lipocalin 1).
GN Names=LCN1; Synonyms=VEGP;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Tongue;
RX MEDLINE=93176795; PubMed=7679926;
RA Blaeker M., Kock K., Ahlers C., Buck F., Schmale H.;
RT "Molecular cloning of human von Ebner's gland protein, a member of the
lipocalin superfamily highly expressed in lingual salivary glands.";
RL Biochim. Biophys. Acta 1172:131-137 (1993).
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=Tears;
RX MEDLINE=93015903; PubMed=1400345;
RA Redl B., Holzfeind P., Lottspeich F.;
RT "cDNA cloning and sequencing reveals human tear prealbumin to be a
member of the lipophilic-ligand carrier protein superfamily.";
RL J. Biol. Chem. 267:20282-20287 (1992).
RN [3]
RP SEQUENCE FROM N.A.
RC TISSUE=Tears;
RX MEDLINE=93272888; PubMed=8500570; DOI=10.1006/exer.1993.1075;
RA Lasseigne H., Gachon A.-M.;
RT "Cloning of a human lacrimal lipocalin secreted in tears.";
RL Exp. Eye Res. 56:605-609 (1993).
RN [4]
RP SEQUENCE FROM N.A.
RX MEDLINE=94156196; PubMed=8112601; DOI=10.1016/0378-1119(94)90752-8;
RA Holzfeind P., Redl B.;
RT "Structural organization of the gene encoding the human lipocalin tear
prealbumin and synthesis of the recombinant protein in Escherichia
coli.";
RL Gene 139:177-183 (1994).
RN [5]
RP SEQUENCE OF 19-38.
RC TISSUE=Nasal mucus;
RA Scalfari F., Castagna M., Fattori B., Andreini I., Marenmani C.,
RA Pelosi P.;
RT "Expression of a lipocalin in human nasal mucosa.";
RL Comp. Biochem. Physiol. 118B:819-824 (1997).
CC -!- FUNCTION: Could play a role in taste reception. Could be necessary
for the concentration and delivery of sapid molecules in the
gustatory system.
CC -!- SUBUNIT: Homodimer (By similarity).
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: Mainly expressed in lachrymal and salivary
glands. Also expressed in the prostate.
CC -!- SIMILARITY: Belongs to the lipocalin family.
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entities requires a license agreement (See http://www.isb-sib.ch/announce/
or send an email to license@isb-sib.ch).
CC EMBL; X62418; CAA44284.1; -.
DR EMBL; X67647; CAA47889.1; -.
DR EMBL; L14927; AAA18633.1; -.
DR EMBL; M90424; AAA61845.1; -.
DR PIR; A44029; LCHUL.
DR Genew; HGNC:6525; LCN1.
DR MIM; 151675; -.
DR GO; GO:0004869; F:cysteine protease inhibitor activity; TAS.
DR GO; GO:0019735; P:antimicrobial humoral response (sensu Verte. . .; TAS.
DR GO; GO:0006508; P:proteolysis and peptidolysis; TAS.
DR InterPro; IPR011038; Calycin.
DR InterPro; IPR000566; Lipoclin_cytFABP.
DR InterPro; IPR002450; vonEbner_gland.
DR Pfam; PF00061; Lipocalin; 1.
DR PROSITE; PS00213; LIPOCALIN; FALSE NEG.
KW Direct protein sequencing; Lipocalin; Signal; Transport.
FT SIGNAL 1 18
```

FT	CHAIN	19	176	Von Ebner's gland protein.
FT	DISULFID	79	171	By similarity.
SQ	SEQUENCE	176 AA;	19250 MW; ODDBF124C8C78CB8 CRC64;	
	Query Match	35.1%;	Score 274.5; DB 1; Length 176;	
	Best Local Similarity	42.3%;	Pred. No. 3.7e-21;	
	Matches	58; Conservative	27; Mismatches 41; Indels 11; Gaps 4;	
Qy		1	MKTFLGLVTLGLAAALS-----FTLBE--DITGTWYVKAMVDKDFPEDRPRKVSPVKV 54	
Dd		1	MKPALLAVSLGILALQAHHLLASDEIQDVSGTWYLKAMTVDRFPPE-MNLESVTPMTL 59	
Qy		55	TALGGGNLEATFTFMREDRCIOKKILMRKTEPGKFSAAYGGRKLIIYLQELPOTDDYFYFC 114	
Dd		60	TTLEGNGLEAKVTMLISGRQCQEVKALEXTDPGKYTADGGKHVAYIIRSHVKOHIFYC 119	
Qy		115	KDQRG-----GLRYMCK 127	
Dd		120	EGLHGKPVRGVRLVGR 136	
	RESULT 5			
	ALL1_CANFA	STANDARD;	PRT; 174 AA.	
ID	ALL1_CANFA			
AC	O18873;			
DT	15-JUL-1998 (Rel. 36, Created)			
DT	15-JUL-1998 (Rel. 36, Last sequence update)			
DT	10-OCT-2003 (Rel. 42, Last annotation update)			
DE	Major allergen Can f 1 precursor (Allergen Dog 1).			
OS	Canis familiaris (Dog).			
OC	Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;			
OC	Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.			
OX	NCBI_TaxID=9615;			
RN	[1]			
RP	SEQUENCE FROM N.A.			
RA	MEDLINE=98158930; PubMed=9497502;			
RX	Konieczny A., Morgenstern J.P., Bizinkauskas C.B., Lilley C.H., Brauer A.W., Bond J.F., Aalberse R.C., Wallner B.P., Kasaiian M.T.; "The major dog allergens, Can f 1 and Can f 2, are salivary lipocalin proteins: cloning and immunological characterization of the recombinant forms.";			
CC	-1- SUBCELLULAR LOCATION: Secreted.			
CC	-1- TISSUE SPECIFICITY: Tongue epithelial tissue.			
CC	-1- ALLERGEN: Causes an allergic reaction in human.			
CC	-1- SIMILARITY: Belongs to the lipocalin family.			
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EMBL:	AFO27177; AAC48794.1; -			
DR	InterPro; IPR011038; Calycin.			
DR	InterPro; IPR000586; Lipocln_cytFABP.			
DR	PFam; PF00061; Lipocalin; 1.			
DR	PROSITE; PS00213; LIPOCALIN; FALSE NEG.			
KW	Allergen; Lipocalin; Signal; Transport.			
FT	SIGNAL	1	18	Potential.
FT	CHAIN	19	174	Major allergen Can f 1.
FT	DISULFID	78	169	By similarity.
FT	CARBOHYD	80	N-linked (GlcNAc...)	(Potential).
SQ	SEQUENCE	174 AA; 19248 MW; 091A3025660806D5 CRC64;		
	Query Match	31.2%;	Score 244; DB 1; Length 174;	
	Best Local Similarity	35.9%;	Pred. No. 6.9e-18;	
	Matches	50; Conservative	29; Mismatches 45; Indels 16; Gaps 3;	
Qy		1	MKTFLGLVTLGLAAALSFTLEBED-----ITGTWYVKAMVDKDFPEDRRPKRV 50	

Db 61 KTEGNNLOVKFTVLISRCQEMSTVLEKTDGPKYTAISKQVYVYSAVEDHYIFY 120
QY 115 KDQRRGGLRYMGKLVGPCRCPHV 137
Db 121 EGGIHRHHFOIAKLVG--RNPEI 141

RESULT 7
VEGP PIG STANDARD; PRT; 176 AA.
AC P53715; O19136;
DT 01-OCT-1996 (Rel. 34, Created)
DT 01-OCT-1996 (Rel. 34, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Von Ebner's gland protein precursor (VEG protein) (Tear prealbumin)
DE (TP) (Tear lipocalin) (Lipocalin-1).
GN Name=LCN1;
OS Sus scrofa (Pig).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
OX NCBI_TaxID=9823;
RN [1]

RP SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
RX MEDLINE=95316441; PubMed=7796060;
RA Garibotti M., Christiansen H., Schmale H., Pelosi P.;
RT "Porcine VEG proteins and tear prealbumins.";
RL Chem. Senses 20:69-76(1995).
RN [2]

RP SEQUENCE FROM N.A.
RC TISSUE=Liver;
RC MEDLINE=98087418; PubMed=9427546; DOI=10.1016/S0378-1119(97)00454-X;
RA Holzfried P., Merschak P., Wojnar P., Redl B.;
RT "Structure and organization of the porcine LCN1 gene encoding Tear
RT lipocalin/von Ebner's gland protein.";
RL Gene 202:61-67(1997).

CC -!- FUNCTION: Could play a role in taste reception. Could be necessary
CC for the concentration and delivery of rapid molecules in the
CC gustatory system.

CC -!- SUBUNIT: Homodimer.
CC -!- SUBCELLULAR LOCATION: Secreted.

CC -!- SIMILARITY: Belongs to the lipocalin family.

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CC or send an email to license@isb-sib.ch).

CC EMBL; S77587; AAC34720.1; -.
CC EMBL; U96150; AAC39166.1; -.
CC PIR; JC6503; JC6503.
CC HSSP; P02754; 1QG5.
CC InterPro; IPR011038; Calycin.
CC InterPro; IPR000566; Lipocin_cytFABP.
CC InterPro; IPR002450; vonEbner_gland.
CC Pfam; PF00061; Lipocalin; 1.
CC PROSITE; PS00213; LIPOCALIN; FALSE NEG.
KW Direct protein sequencing; Lipocalin; Signal; Transport.
FT SIGNAL 19 Potential.
FT CHAIN 20 176 Von Ebner's gland protein.
FT FTFT 80 171 By similarity.
FT FTFT 136 136 G -> A (in Ref. 2).
SQ SEQUENCE 176 AA; 19352 MW; BB7D6D750D4AC4AB CRC64;

Query Match 30.5%; Score 238.5; DB 1; Length 176;
Best Local Similarity 36.2%; Pred. No. 2.7e-17;
Matches 50; Conservative 30; Mismatches 47; Indels 11; Gaps 3;

QY 1 MKTFLGVTLGLAALSFLEE-----EDITGTWYKAMVVDKDFPDRPRKVPV 52
Db 2 MRALLAIGLGVAAALQ--AQEPFVAGQPLQDLGRWYLKAMTSDPEIP-GKKPESVTPL 58

QY 53 KVTALGGNLEATFTFMREDRCIQKKILMRKTEEPGKFSAYGGRKLIYLQBLPGTDDYVF 112
Db 59 ILKALEGGDLEAQITFLIDGQCDVTLVLKTNQFFTFAYDGRVYVILPSKVVDHYIL 118
QY 113 YCKDQRRGGLRYMGKLVG 130
Db 119 YCEGELDQGEVRMAKLVG 136

RESULT 8

Q866S8 PRELIMINARY; PRT; 176 AA.
AC Q866S8;
DT 01-JUN-2003 (TRENBLrel. 24, Created)
DT 01-JUN-2003 (TRENBLrel. 24, Last sequence update)
DT 01-OCT-2003 (TRENBLrel. 25, Last annotation update)
DE Von Ebner gland protein.
DE Sus scrofa (Pig).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
OX NCBI_TaxID=9823;
RN [1]

RP SEQUENCE FROM N.A.

RX MEDLINE=22939397; PubMed=14578123;

RA Guiraudie G., Pageat P., Cain A.H., Madec I., Meillour P.N.;

RT "Functional characterization of olfactory binding proteins for
RT appealing compounds and molecular cloning in the vomeronasal organ of
RT pre-pubertal pigs.";

RL Chem. Senses 28:609-619(2003).

DR EMBL; AY177149; AAO18367.1; -.

DR HSSP; P02754; 1QG5.

DR GO; GO:0005215; F:transporter activity; IEA.

DR GO; GO:0006810; P:transport; IEA.

DR InterPro; IPR011038; Calycin.

DR InterPro; IPR000566; Lipocin_cytFABP.

DR InterPro; IPR002450; vonEbner_gland.

DR Pfam; PF00061; Lipocalin; 1.

DR PRINTS; PR01175; VNEBERGLAND.

SQ SEQUENCE 176 AA; 19368 MW; AF7C2D750D4AC4AB CRC64;

Query Match 30.5%; Score 238.5; DB 2; Length 176;
Best Local Similarity 36.2%; Pred. No. 2.7e-17;
Matches 50; Conservative 30; Mismatches 47; Indels 11; Gaps 3;

QY 1 MKTFLGVTLGLAALSFLEE-----EDITGTWYKAMVVDKDFPDRPRKVPV 52
Db 2 MRALLAIGLGVAAALQ--AQEPFVAGQPLQDLGRWYLKAMTSDPEIP-GKKPESVTPL 58

QY 53 KVTALGGNLEATFTFMREDRCIQKKILMRKTEEPGKFSAYGGRKLIYLQBLPGTDDYVF 112
Db 59 ILKALEGGDLEAQITFLIDGQCDVTLVLKTNQFFTFAYDGRVYVILPSKVVDHYIL 118

QY 113 YCKDQRRGGLRYMGKLVG 130
Db 119 YCEGELDQGEVRMAKLVG 136

RESULT 9

Q8K1H9 PRELIMINARY; PRT; 176 AA.
AC Q8K1H9;
DT 01-OCT-2002 (TRENBLrel. 22, Created)
DT 01-OCT-2002 (TRENBLrel. 22, Last sequence update)
DT 25-OCT-2004 (TRENBLrel. 28, Last annotation update)
DE CDNA sequence BC027556 (lipocalin 13).
GN Name=BC027556; Synonyms=Lcn13;
OS Mus musculus (Mouse)
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.

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GN Name=Vegpl; Synonyms=Vegp;
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
ON NCBI_TaxID=10116;
RX [1]
RN
RP SEQUENCE FROM N.A.
RA STRAIN=Wistar; TISSUE=Lingual salivary gland;
RC MEDLINE=90136923; PubMed=1689010; DOI=10.1038/343366a0;
RR Schmale H., Holtgreve-Grez H., Christiansen H.;
RT "Possible role for salivary gland protein in taste reception indicated by homology to lipophilic-ligand carrier proteins.";
RL Nature 343:366-369(1990).
RN [2]
RP SEQUENCE FROM N.A.
RA STRAIN=Wistar; TISSUE=Lingual salivary gland;
RC MEDLINE=94237155; PubMed=7514123;
RR Kock K., Ahlers C., Schmale H.;
RT "Structural organization of the genes for rat von Ebner's gland proteins 1 and 2 reveals their close relationship to lipocalins.";
RL Eur. J. Biochem. 221:905-916(1994).
CC -!- FUNCTION: Could play a role in taste reception. Could be necessary for the concentration and delivery of sapid molecules in the gustatory system.
CC -!- SUBUNIT: Homodimer (By similarity).
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: Belongs to the lipocalin family.
CC -----
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CC -----
DR EMBL; X52016; CAA36263.1; -
DR EMBL; X74805; CAA52809.1; -
DR PIR; S08161; S08161.
DR RGD; 619872; Vegpl.
DR InterPro; IPR011038; Calycin.
DR InterPro; IPR000566; Lipocln_cytFABP.
DR InterPro; IPR002450; vonEbner_gland.
DR Pfam; PF00061; Lipocalin; 1.
DR PROSITE; PS00213; LIPOCALIN; FALSE NEG.
KW Lipocalin; Multigene family; Signal; Transport.
FT SIGNAL 1 18 Potential.
FT CHAIN 19 177 Von Ebner's gland protein 1.
FT DISULFID 80 172 By similarity.
SQ SEQUENCE 177 AA; 19725 MW; CCA36A7F544D6707 CRC64;
Query Match 29.7%; Score 232; DB 1; Length 177;
Best Local similarity 36.4%; Pred. No. 1.4e-16;
Matches 52; Conservative 28; Mismatches 55; Indels 8; Gaps 3;
QY 1 MKTLFLGVTLLGLAAALS-----FTLEEDITGWYVKAMVDKDFEDR-RPRKVSFKV 54
DB 1 MKALLTFGLSLLALQAQAFPTTENQDVSGTWYLKAANDKEIFDKFGSVSVPMKI 60
QY 55 TALGGNLEATFFMRREDRIQKKILMRKTBPGEKFSAYGGRLIYLQLPGTTDDVVFC 114
DB 61 KTEGGNLQVKFTVLTRCKEMSTVLEKTDPEPKATYSKGQVLIIPSSVEDHVIYY 120
QY 115 KDQRGGLRYMGKLVCPCPHV 137
DB 121 EGKIHRRHFQIAKLVG--RDPEI 141
RESULT 11
ID LLPB_MACEU STANDARD; PRT; 174 AA.
AC O8SQ30;
DT 28-FEB-2003 (Rel. 41, Created)

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DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Name lactation protein B precursor (LUP-B).
GN Name=LUPB;
OS Macropus eugenii (Tamar wallaby).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Metatheria; Diprotodontia; Macropodidae; Macropus.
OX NCBI_TaxID=9315;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Mammary gland;
RX MEDLINE=21856506; PubMed=11867236; DOI=10.1016/S0378-1119(01)00883-6;
RA Troit J.F., Wilson M.J., Hovey R.C., Shaw D.C., Nicholas K.R.;
RT "Expression of novel lipocalin-like milk protein gene is
RT developmentally-regulated during lactation in the tamar wallaby,
RT Macropus eugenii."
RL Gene 283:287-297(2002).
CC -!- FUNCTION: Probably serves a role in the transport of a small
CC ligand released during the hydrolysis of milk fat.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: Mammary gland specific. Secreted in milk.
CC -!- DEVELOPMENTAL STAGE: Produced during the late phase of lactation.
CC -!- SIMILARITY: Belongs to the lipocalin family.
CC -----
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CC -----
CC EMBL; AF319463; AAL85634.1; -.
CC InterPro; IPR011038; Calycin.
CC InterPro; IPR000566; Lipocalin_cytFABP.
CC InterPro; IPR002450; vonEbner_gland.
CC Pfam; PF00061; Lipocalin; 1.
CC PROSITE; PS00213; LIPOCALIN; FALSE_NEG.
CC Lipocalin; Milk; Signal; Transport.
CC SIGNAL 1 18 Potential.
CC CHAIN 19 174 Late lactation protein B.
CC DISULFID 77 169 By similarity.
CC SEQUENCE 174 AA; 19875 MW; 61C48B673226EDA4 CRC64;

Query Match 27.9%; Score 218.5; DB 1; Length 174;
Best Local Similarity 35.1%; Pred. No. 3.8e-15;
Matches 47; Conservative 28; Mismatches 56; Indels 3; Gaps 1;

QY 1 MKTFLGLVTGLAAL---SFTLEEDITGTWYKAMVVDKDFPEDRRPRKVS 57
DB 1 MKVLFLLTALSLSILQAQSSSSSQFEGTYFVKAIVTDSEFEKNKPKAUSPLVTTL 60
*QY 58 GGNLEATFTFMRDRCIOKKILMRTEEPGKFSAYGGRKLIYLOELPGTDYVYCKDQ 117
DB 61 SNGDLEAKFTTNMNGICEIKMKFEKTDKGIPTNDGSGRQVLIKTSVRDHWILFCEGE 120

QY 118 RRGGLRYMGKLVGP 131
DB 121 LHGMQVRIAKLGP 134

RESULT 12
VNS2_MOUSE
ID VNS2_MOUSE STANDARD; PRT; 185 AA.
AC Q62472;
DT 15-JUL-1998 (Rel. 36, Created)
DT 15-JUL-1998 (Rel. 36, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Vesomeral secretory protein II precursor (VNSP II) (Lipocalin 4).
GN Name=Lcn4;
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

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OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=ddi;
RX MEDLINE=95111792; PubMed=7813422;
RA Miyawaki A., Matsushita F., Ryo Y., Mikoshiba K.;
RT "Possible pheromone-carrier function of two lipocalin proteins in the
RT vomeronasal organ."
RL EMBO J. 13:5835-5842(1994).
CC -!- FUNCTION: Transport of lipophilic molecules, possible pheromone-
CC carrier.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: Specifically expressed in vomeronasal and
CC posterior glands of the nasal septum, the ducts of which open into
CC the lumen of the vomeronasal organ.
CC -!- SIMILARITY: Belongs to the lipocalin family.
CC -----
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CC -----
CC EMBL; D38581; BAA07582.1; -.
CC PIR; S51803; S51803.
CC MGI; MGI:102668; Lcn4.
CC InterPro; IPR011038; Calycin.
CC InterPro; IPR000566; Lipocalin_cytFABP.
CC InterPro; IPR002450; vonEbner_gland.
CC Pfam; PF00061; Lipocalin; 1.
CC PROSITE; PS00213; LIPOCALIN; FALSE_NEG.
CC Lipocalin; Pheromone-binding; Signal; Transport.
CC SIGNAL 1 19 Potential.
CC CHAIN 20 185 Vesomeral secretory protein II.
CC DISULFID 80 172 By similarity.
CC SEQUENCE 185 AA; 21399 MW; D93702D4FA5344AB CRC64;

Query Match 26.2%; Score 205; DB 1; Length 185;
Best Local Similarity 33.3%; Pred. No. 1.1e-13;
Matches 48; Conservative 22; Mismatches 52; Indels 22; Gaps 3;

QY 1 MKTFLGLVTGLAAL-----LSFTLEEDITGTWYKAMVVDKDFPEDRRPRKVS--- 50
DB 1 MKSLLTVTLSLVATLTQYDLPFISEDKLSGVWFIKATVSQR-----REVEGET 52
QY 51 ----PVKVTALGGGNEATFTFMRDRCIOKKILMRTEEPGKFSAYGGRKLIYLOELPG 106
DB 53 LVAFPIKFTCPPEGTLRLHRTLASKGECINVGIRLQRTTEEPGQYSAFWGHITLYIYDLPV 112
QY 107 TDYVYFKDQRGRLRYMGKLVG 130
DB 113 KDHYIYCSEHPFKISQFGYLIG 136

RESULT 13
LLP_TRIVU
ID LLP_TRIVU STANDARD; PRT; 176 AA.
AC Q29144;
DT 15-JUL-1998 (Rel. 36, Created)
DT 15-JUL-1998 (Rel. 36, Last sequence update)
DT 30-MAY-2000 (Rel. 39, Last annotation update)
DE Late lactation protein precursor (LLP).
OS Trichosurus vulpecula (Brush-tailed possum).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Metatheria; Diprotodontia; Phalangeridae; Trichosurus.
OX NCBI_TaxID=9337;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Mammary gland;
RX MEDLINE=98154412; PubMed=9493361;
RA Piotte C.P., Hunter A.K., Marshall C.J., Grigor M.R.;

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RT "Phylogenetic analysis of three lipocalin-like proteins present in the
RL milk of Trichosurus vulpecula (Phalangeridae, Marsupialia).";
CC -!- FUNCTION: Probably serves a role in the transport of a small
CC ligand released during the hydrolysis of milk fat.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: Mammary gland. Secreted in milk.
CC -!- DEVELOPMENTAL STAGE: Produced during the late phase of lactation.
CC -!- SIMILARITY: Belongs to the lipocalin family.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; U34287; AA93179.1; -.
DR InterPro; IPR011038; Calycin.
DR InterPro; IPR000566; Lipocln_cytFABP.
DR InterPro; IPR002450; vonEbner_gland.
DR Pfam; PF00061; Lipocalin; 1.
DR PROSITE; PS00213; LIPOCALIN; FALSE_NEG.
KW Lipocalin; Milk; Signal; Transport.
FT SIGNAL 1 18 By similarity.
FT CHAIN 19 176 Late lactation protein.
FT DISULFID 78 171 By similarity.
SQ SEQUENCE 176 AA; 20598 MW; 325138B2468F017D CRC64;

Query Match 25.5%; Score 199.5; DB 1; Length 176;
Best Local Similarity 34.5%; Pred. No. 4.2e-13;
Matches 49; Conservative 24; Mismatches 52; Indels 17; Gaps 4;

QY 1 MKTLFLGVTGLGAAAL-----SFTLEEEDITGTWVVKAMVVDKFPEDRRPRKVP 52
DB 1 MKVLEFTALSLSFIHADDAVAFSTPSE-----GTYYVQVIAVDKEFEIPEIDMSPL 56

QY 53 KVTALGGGNLEATFTFMREDRCIOKKILMRKTEBPKFSAYGGRKLIYLQELPGTD---D 109
DB 57 TIMYLDGKMEARFTMKDDNCEEINLTKTADPRKITY--NRRLRYTCAAVRTSKQH 114

QY 110 YVFCYKQDRGGLRYMGKLVGP 131
DB 115 WILVCFREFQGTIRMAKLVGP 136

RESULT 14
ID Q71RT0 PRELIMINARY; PRT; 176 AA.
AC Q71RT0;
DT 05-JUL-2004 (TrEMBLrel. 27, Created)
DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE Late lactation protein-A.
GN Name=LIP-A;
OS Macropus eugenii (Tamar wallaby).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Metatheria; Diprotodontia; Macropodidae; Macropus.
OX NCBI_TaxID=9315;
RN [1]
RP SEQUENCE FROM N.A.
RA Trot J.F., Adams T.E., Wilson M., Nicholas K.R.;
RL Submitted (FEB-2001) to the EMBL/GenBank/DBJ databases.
CC EMBL; AF348406; AAQ15117.1; -.
DR GO; GO:0005215; R:transporter activity; IEA.
DR GO; GO:0006810; R:transport; IEA.
DR InterPro; IPR011038; Calycin.
DR InterPro; IPR000566; Lipocln_cytFABP.
DR InterPro; IPR002450; vonEbner_gland.
DR Pfam; PF00061; Lipocalin; 1.
DR PRINTS; PR01175; VNENERGLAND.
SQ SEQUENCE 176 AA; 20638 MW; 399D8D8DEDE1F1C8A CRC64;

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Query Match 24.1%; Score 188.5; DB 2; Length 176;
Best Local Similarity 31.9%; Pred. No. 6.4e-12;
Matches 44; Conservative 31; Mismatches 54; Indels 9; Gaps 4;

QY 1 MKTLFLGVTGLGAAAL---SFTLEE-EDITGTWVVKAMVVDKFPEDRRPRKVPKVTA 56
DB 1 MRVLFLISLSFISIIHADDAFSEFKPSEGTYYVQVIAVDKEFEIPEIDISPLITY 60

QY 57 LGGNLEATFTFMREDRCIOKKILMRKTEBPKFSAYGGRKLIYLQELPGTD---YVYF 113
DB 61 LNNCKMEAKFTVKDDNCEEINLTKIDEPRKITT--NRHLHICDVTVRTSEEKYWLS 118

QY 114 CKDQRRGGLRYMGKLVGP 131
DB 119 CVREFQGTIRMAKLVGP 136

RESULT 15
ID LLPA_MACEU STANDARD; PRT; 176 AA.
AC P20462;
DT 01-FEB-1991 (Rel. 17, Created)
DT 01-FEB-1991 (Rel. 17, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Late lactation protein A precursor (LLP-A).
GN Name=LLPA;
OS Macropus eugenii (Tamar wallaby).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Metatheria; Diprotodontia; Macropodidae; Macropus.
OX NCBI_TaxID=9315;
RN [1]
RP SEQUENCE FROM N.A.
RA Collet C., Joseph R., Nicholas K.R.;
RT "Molecular cloning and characterization of a novel marsupial milk
RL protein gene.";
RL Biochem. Biophys. Res. Commun. 164:1380-1383(1989).
RN [2]
RP SEQUENCE OF 19-87 AND 116-131.
RA MEDLINE=87241271; PubMed=3109381;
RA Nicholas K.R., Messer M., Elliot C., Maher F., Shaw D.C.;
RT "A novel whey protein synthesized only in late lactation by the
RL mammary gland from the tamar (Macropus eugenii).";
RL Biochem. J. 241:899-904(1987).
RN [3]
RP SIMILARITY TO THE LIPOCALIN FAMILY.
RX MEDLINE=93222225; PubMed=8466952; DOI=10.1016/0005-2760(93)90165-6;
RA Collet C., Joseph R.;
RT "A novel member of the lipocalin superfamily: tamar wallaby late-
RL lactation protein.";
RL Biochim. Biophys. Acta 1167:219-222(1993).
CC -!- FUNCTION: Probably serves a role in the transport of a small
CC ligand released during the hydrolysis of milk fat.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: Mammary gland specific. Secreted in milk.
CC -!- DEVELOPMENTAL STAGE: Produced during the late phase of lactation.
CC -!- SIMILARITY: Belongs to the lipocalin family.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; X15213; CAA33283.1; -.
DR PIR; A28561; A28561.
DR PIR; A33672; A33672.
DR InterPro; IPR011038; Calycin.
DR InterPro; IPR000566; Lipocln_cytFABP.
DR InterPro; IPR002450; vonEbner_gland.

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DR Pfam; PF00061; Lipocalin; 1.
DR PROSITE; PS00213; LIPOCALIN; FALSE NEG.
KW Direct protein sequencing; Lipocalin; Milk; Signal; Transport.
FT SIGNAL 1 18
FT CHAIN 19 176 Late lactation protein A.
FT DISULFID 78 171 By similarity.
FT CONFLICT 59 59 T -> S (in Ref. 2).
FT CONFLICT 126 126 T -> I (in Ref. 2).
SQ SEQUENCE 176 AA; 20612 MW; B327EA4F09DED435 CRC64;

Query Match 23.8%; Score 186.5; DB 1; Length 176;
Best Local Similarity 31.9%; Pred. No. 1e-11;
Matches 44; Conservative 31; Mismatches 54; Indels 9; Gaps 4;
QY 1 MKTLFLGVTLGLAAL---SFTLEE-EDITGYVKAMVVDKFPEDRRPRKVPVKVTA 56
| : ||| : ||| :
Db 1 MRVLFITISLSLFSIIHADDFAFSEPKPSEGTVYVQVIAVDKFEPEDEIPRDISPLTITY 60
QY 57 LGGNLEATFTWREDRCIOKKILMRKTEEPGKFSAYGGKLIYLQELPGTDD---YVFY 113
| : ||| : ||| :
Db 61 LKNGKMEAKFTVKKNCCNEINLTLEKIDEPKRITT--TRHLHHICDVTVTSEKYYWLS 118
QY 114 CKDQREGGLRYMGKLVGP 131
| :
Db 119 CVREPGQTQIREAELVGP 136

Search completed: June 7, 2005, 14:39:31
Job time : 181 secs

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